

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 906—VOL. XXIII.]

LONDON, SATURDAY, JANUARY 1, 1853.

[PRICE 6d.

MINE MATERIALS FOR SALE, MOLD, FLINTSHIRE.

1 14-in. 10 ft. plunger-pole, with case and	1 14-in. 9½ ft. slide-piece, with blast-hole,
stuffing-box.	case, &c.
1 14-in. 3½ ft. H-piece.	1 13-in. 2½ ft. slack doorpiece.
1 14-in. 3 ft. slack doorpieces.	1 9-in. 3½ ft. do. do.
1 14-in. 6 ft. windbox.	1 6-in. 9 ft. flange pipe.
	1 6-in. 5 ft. do.

The above are deposited in the timber-yard of Messrs. Hughes and Son, adjoining the Mold Railway Station.—Application to be made to Mr. Robert Williams, mine agent, Mold.—By Usha Mold, Nov. 22, 1852.

STAFFORDSHIRE.—TO COAL, MASTERS, IRON MANUFACTURERS, AND OTHERS.—FREEHOLD PROPERTY.

BLOXWICH COLLIERY, NEAR WALSBALL.—TO BE SOLD, BY PRIVATE CONTRACT, THE BLOXWICH COLLIERY ESTATE, NEAR WALSBALL, comprising upwards of 60 acres, and with the following mines remaining to be gotted, viz.:

Heath coal, about	45 acres,
Brownstone, about	39 "
Yard coal, about	59 "
Bottom coal and whitestones	57 "

There is a powerful PUMPING ENGINE, and FOUR WINDING ENGINES, with BRICK ENGINE-HOUSES, &c., which, with the ROPEs and CHAINS, RAILS, PIT-FRAMES, and GENERAL COLLIERY STOCK, are to be taken at a valuation, and which form a sufficient plant to bring the mines at once into the market at a very little expense. There is an excellent MINE OF BRICK CLAY upon the property, good OFFICES, &c., and 21 substantially erected WORKMEN'S COTTAGES. The Wyre and Essington Canal passes through the property, and it is also intersected by the projected line of the Staffordshire Mineral Railway.

Mr. Thomas Cooper, at the colliery, will point out the same; and for price and further particulars, apply to Mr. William Murray, solicitor, London-street, Fenchurch-street, London; Mr. John Harward, solicitor, or Messrs. Gates and Perrens, land agents and auctioneers, Stourbridge.

COLLIERY, GLAMORGANSHIRE.—TO BE LET, ON LEASE, THE LLETTY MAWR COLLIERY, most advantageously situated, being only three miles from Neath, and immediately above the Vale of Neath Railway and Canal, both leading to Neath Briton Ferry and Swansea. The COAL is 3 feet thick, freemining, and of very superior quality, suitable for household and all other purposes. It may be worked very cheaply, and with a small capital, as a short level will drain the whole field, and a short incline connect the mouth of the level with the above railway and canal—neither steam or horses will, therefore, be required.—Application to be made to Mr. Lewis Griffiths, Ynysgerwyr, near Neath.

CALLINGTON MINES COMPANY.—At the BI-MONTHLY MEETING of this Company, held at the office, Salvador House, Bishopsgate, on Friday, the 31st December, 1852.

PETER STAINSBY, Esq., in the chair.

The notice convening the meeting having been read, as also the report from the agents, and financial statement, it was resolved—

That the reports and accounts now submitted be passed, errors and omissions excepted; and that a CALL of 5s. per (500th) share be made, payable to the treasurer on or before the 18th Jan., to liquidate the debt balance of £1,166 1s. 7d.

That, in accordance with Rule 18, a special meeting of shareholders be convened for the 19th Jan., for the purpose of forfeiting all shares upon which any call or calls then due shall remain unpaid.

The usual thanks were voted to the chairman.

A vote of thanks to the chairman concluded the business of the meeting.

HENRY PALMER, Purser.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENNALLICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Artistic Expedition, and every part of the globe. Messrs. BRUNTON & CO. are at all times PREPARED TO EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, and DAVEY, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a *thorough* *thought* *into* its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address—BICKFORD, SMITH, and DAVEY, Tuckingmill, Cornwall.

MR. G. F. MUNTZ'S (JUN.) PATENT SOLID BRASS TUBES, 10½ d. per lb., delivered in any part of the United Kingdom.—In introducing these tubes to the notice of engineers and the public, the patentee respectfully directs their attention to some of the advantages which they possess over those previously in use.

1st. Economy in the first cost.—2d. Greater durability, being made of a mixture of metal hard in its own nature, and not mechanically hardened, as ordinary brass tubes are, which renders them liable to split or burst when subjected to the expansion and contraction caused by the heating and cooling of the boiler.—3d. Equality of hardness throughout, the metal being sufficiently tough to bear expanding, when fixing in the holes, without softening the ends, which is necessary in fixing the brass tubes previously in use, and which causes the softened parts to wear more.—4th. They are less liable to corrode than any mixture of brass which can be manufactured into tubes by the process previously employed.

G. F. Muntz's Patent Metal Company, French Walls, Birmingham, sole manufacturers.—Agents for London: Charles Moss and Co., 25, Fenchurch-street; Young, Dawson, and Co., Limehouse.—Bristol: E. Drew, Clifton Park.—Liverpool: C. Moss, and Co., Seckford-street.

STIRLING'S PATENT ALLOYS.—RAILWAY CARRIAGE BEARINGS, MILL-BRASSES, and all DESCRIPTIONS OF CASTINGS are MANUFACTURED BY ALFRED BARRETT, Bishopsgate Foundry, Skinner-street, SOLE LICENSED FOR LONDON.

BELLS of very superior quality (Stirling's Patent) are also SUPPLIED.

TO RAILWAY AND TELEGRAPH COMPANIES, PROPRIETORS OF COLLIERIES, MINES, &c.—JAMES B. WILSON, of the HAYDOCKPATENT WIRE-ROPE WORKS, NEWTON-LE-WILLOWS, LANCASHIRE, is prepared to supply the public with PLAT and ROUND ROPES for PITS, MINES, and INCLINES; and also with his PATENT SUBMARINE TELEGRAPH ROPE; at the lowest prices of the day. The ropes are manufactured under his improved patent, substituting a strand of fine wires for the core in lieu of a hempen one, as at present used.

STEAM TO INDIA, CHINA, AUSTRALIA, &c., VIA EGYPT.—THE PENINSULAR and ORIENTAL STEAM NAVIGATION COMPANY book passengers and receive goods and parcels for ADEN, CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 4th and 20th of every month, and from SUEZ on or about the 21st and 26th of the month.

The rates of passage-money on these lines have been materially reduced.

N.B.—The Company's steamers now run direct between CALCUTTA, PENANG, SINGAPORE, and HONG KONG, and between HONG KONG and SHANGHAI.

AUSTRALIA.—By the packet of the 4th of March, and of the 4th of every alternate month thereafter, in correspondence with steamers from SUEZ and SINGAPORE, the Company will be enabled to convey passengers, parcels, and specie to BATAVIA, KING GEORGE'S SOUND, ADELAIDE, PORT PHILIP, and SYDNEY.

MEDITERRANEAN.—To MALTA on the 4th, 20th, and 26th of every month. To CONSTANTINOPLE on the 29th of the month. To ALEXANDRIA, on the 4th and 20th of the month, from Southampton; and from MARSEILLEs to MALTA and ALEXANDRIA, on the 10th and 26th of the month.

SPAIN and PORTUGAL.—To Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 17th, and 27th of the month.

For further information, and tariffs of the Company's recently-revised and reduced rates of passage-money and freight, for plans of the vessel, and to secure passages, &c., apply at the Company's Office, 122, Leadenhall-street, London; and Oriental-place, Liverpool.

NEW PATENT ACT, 1852.—MR. CAMPIN, having advocated Patent Law Reform before the Government and Legislature, and in the pages of the Mining Journal, &c., is now READY to ADVISE and ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT.

The Circular of Information, gratis, on application to the Patent Office and the Patent Registry, 7, Strand.

MR. JAMES CROFTS, of No. 1, FINCH LANE, CORNHILL, MINING BROKER.

Mr. J. CROFTS begs to OFFER his SERVICES for the PURCHASE or SALE of MINING SHARES of every description, and not being a DEALER, transacts business only for principals on commission.

Mr. CROFTS' weekly list comprises only such shares as he has actually on hand, or under control, but he may be consulted upon every description of mining shares, whether for purchase or sale.—Dividend Mines pay from 10 to 25 per cent, per annum.

WEEKLY LIST OF SHARES FOR SALE.

DIVIDEND MINES.—Linares, South Cadron, Trevikey and Barrier, Spears Consols, West Providence, Bedf ord United, Merlin, Wheal Golden, South Tamar, Alfred Consols, and Cobre.

PROGRESSIVE MINES.—Gonamena, Great Wheal Badock, Duke of Cornwall, North Wheal Robert, Kilbricken, North Crever, Wheal Longford and Baring United, Creator, Okel Tor, North Towy, Bell and Lanarth, Duke of Cornwall (tin, Bodmin), Devon, Kapunda, Santiago de Cuba, and North Wheal Trewhay.

Mr. CROFTS has made arrangements with an eminent firm on the Stock Exchange to BUY or SELL in such SHARES and MINES as are then dealt in, without any addition to the commission charged by Stock Exchange Brokers, and Mr. Crofts also transacts business in all British and Foreign Railways.

* Mr. CROFTS begs to call the attention of his friends to COLONIAL GOLD, NOUVEAU MONDE, PORT PHILIP, and WEST MARINOSA GOLD MINING SHARES, which he still considers susceptible of a large advance in price. The yield of Gold, both in Australia and California, upon which the success of these undertakings is based, in connection with ample capital and good management, both here and at the mines, is beyond the most astounding magnitude. Closing prices this day: Colonial Gold, 3½% pm.; Nouveau Monde, 1½% pm.; Port Philip, 2½% pm.; West Marinos, ¾% pm.

Hours of business:—Half-past Nine till Five, daily. Bankers—The London Joint-Stock Bank, Princes-street, City.

Dated Friday, Dec. 31, 1852, No. 1, Finch-lane, Cornhill.

ON THE FIRST OF JANUARY NEXT, Mr. CROFTS purposes to REMOVE his BUSINESS ENTIRELY to No. 1, FINCH LANE, CORNHILL, where all communications may be addressed. Office hours, Half-past Nine till Five. —Dec. 31, 1852.

MR. JAMES LANE, MINING AGENT, 33, THREADNEEDLE STREET, LONDON (Established 10 Years).

I begs to inform his friends and the public, that the SHARES which he is prepared to DEAL IN are not confined to the limits of an advertisement, but would refer to the general list of the Mining Journal, and is in a position to TRANSACT BUSINESS in any mines quoted in that list. Mr. LANE will furnish a list with latest prices on application.

MR. JOSEPH JAMES REYNOLDS, STOCK & SHAREBROKER, 23, THREADNEEDLE-STREET, AND 28, NEW BOND-STREET, PICCADILLY. MR. REYNOLDS has BUSINESS TO TRANSACT in the following MINES:—

Aqua Fria	Leeds and St. Aubyn	Trevena	Trevikey and Barrier.
Alfred Consols	Leland Consols	Levant	Trelistock.
Alt-y-Crib	Levante	Marko Valley	Trumpet Consols
Anglo-California	Levante	Mary Ann	Tywardreath
Balmoor Beacon	Levante	Mendip Hills	Tywardhaile
Bedford United	Levante	Merllyn	Unity Consols
Bell and Lanarth	Levante	Molland	United Mines (Tavistock)
Binton Consols	Levante	Monarch Gold	United Mines (Gwenn)
Black Craig	Levante	Mostyn	Venton
Bodmin Consols	Levante	Nanegollan	Wellington
Boscombe Down	Levante	Nant-y-Car	West Abraham
Brewer	Levante	Neptune	West Alfred Consols
Britannia Gold & Copper	Levante	North Levant	West Cadron
Burra Burra (Australia)	Levante	North Frances	West Darlington
Callington	Levante	North Bassett	West Ding Dong
Cardigan Wood	Levante	North Pool	West Stray Park
Carslton Creek	Levante	North Roskarn	West Phoenix
Cathedral	Levante	North Stafford Coal	West Providence
Carvanal	Levante	North Wheal Trewhay	West Russell
Castle Dinas	Levante	North Wheal Trewhay	West Treasury
Castle Inn	Levante	Orsedd	West Trethelias
Castles	Levante	Pendarves and St. Aubyn	Wheel Bulter
Cookford	Levante	Penhale Consols	Wheel Carne
Conduorow	Levante	Phoenix Great Consols	Wheel Clifford
Cookford	Levante	Port Philip & Col. Gold	Wheel Golden
Cox's Kitchen	Levante	Quaid Consols	Wheel Ellen (Breadon)
Cradlock Moor	Levante	Round Hill (Salop)	Wheel Enys (Wendron)
Cubert	Levante	Silver Valley	Wheel Fatwork
Devon Burr Burra	Levante	Sourton Consols	Wheel Kitty
Devon and Courtney	Levante	South Frances	Wheel Langford
Devon Consols North	Levante	South Cadron	Wheel Lovell
Devon Great Consols	Levante	South Conduorow	Wheel Samson
Dolcoath	Levante	East Black Craig	Wheel Squire
Duke of Cornwall	Levante	East Halsamming	Wheel Surprise
East Alfred Consols	Levante	East Margaret	Wheel Trevarah
East Black Craig	Levante	East Pool	Wheel Tremayne
East Halsamming	Levante	East Seton and Mandie	Wheel Tryphena
East Margaret	Levante	East Wheal Russell	Wheel Seton
East Pool	Levante	East Wheal Russell	Wheel Syden
East Seton and Mandie	Levante	South of Scotland	West Wheal Alfred
East Wheal Russell	Levante	South Wh. Bassett	West Wheal Frances
Egair Lee	Levante	South Carr. Basset	West Wheal Robins
Emmoo Eliza	Levante	Spearne Consols	West Wheal Russell
Four Dargue (Cumberl.)	Levante	Stray Park	West Wheal Treasury
Garrett Gonamena	Levante	Tavy Consols	Wheel Tehidy
Granberry and St. Aubyn	Levante	Tamar Consols	West Bassett (Tawton)
Great Bean	Levante	Tees Side	Wheel Fortune (South)
Great Sheba Consols	Levante	Trecroft	Wheel Gill
Great Work	Levante	Treborth	Wheel Langford
Great Wheal Alfred	Levante	Trebrell Consols	Wheel Lemon
Great Wheal Badock	Levante	Trefusis	Whitford
Great Wheal Fortune	Levante	Trehane	Wood Mine
Great Bryn Consols	Levante	Trelawny	
Kilbricken	Levante		

And SHARES FOR SALE in the West Cornwall Railway.

J. J. REYNOLDS will furnish a LIST, with the LATEST PRICES, of DIVIDEND-PAYING MINES, together with others of a speculative character, which promise ultimately to remunerate the capitalist, the former and latter under the most respectable management—a most important point to be considered by persons disposed to invest, not only as regards the management, but especially in speculative mines, the responsibility of the partners with whom they embark as co-adventurers.

THE MINING JOURNAL,

GREAT WHEAL VOR UNITED MINES, CORNWALL (TIN AND COPPER).

Conducted on the "Cost-book Principle."—In 200,000 parts, or shares, of £1 each.

These mines being worked on the above principle, subscribers will not be required to sign any deed, and their liability will be absolutely limited to the number of shares subscribed for.

CHARLES JAMES ANTHONY, Esq. HENRY RANKING, Esq.
Capt. CREESE, R.N. H. W. SCHNEIDER, Esq.
JOHN OLIVER HANSON, jun., Esq. CHARLES TRUEMAN, Esq.
E. V. NEALE, Esq. AUGUSTUS A. VANSITTART, Esq.

BANKERS. London : Messrs. Barnett, Hoare, and Co.; Messrs. Sir W. P. Call, Bart., Marten, and Co.; Helston : The Union Bank.

SOLICITORS. Messrs. Jenkins, Sweeting, & Jenkinson, London ; Messrs. Grylls & Hill, Helston.

BROKERS. Mr. Thomas Moxon, 3, Austinfriars, London.

OFFICES.—17, GRACECHURCH-STREET, CITY.

These MINES, formerly worked to so much advantage, are situated chiefly in the parish of Breage, near Helston, in the county of Cornwall, embracing Old Wheal Vor, Carleven, Pollard, Polrose, and other mines, in the clay-slate formation, adjoining the granite, and constitute a continuous run, above two miles long by one broad, of ground which long experience has proved to be one of the richest mineral districts in the world. They are held under mining leases for 21 years, from His Grace the Duke of Leeds, Charles Trelewain, Esq., Christopher Wallis Popham, Esq., Sir John Y. Buller, Bart., and others, at the very moderate rates of 1-3dth for the principal portion of the ground, and 1-2dth for the remainder.

The mines (to which much new and rich mineral property has been added) during the whole term of the former workings, and up to the time of the cessation of the works, yielded large profits. The official returns from the ore-books show that during the last workings upwards of £2,000,000 sterling of tin and copper ore (yielding large dividends), have been returned from these mines; and they are still capable of producing as much more, a large proportion of the richest part being still unexplored, and a still larger proportion unexplored.

The causes (now, happily, no longer in existence) which, about eight years ago, led to their being stopped, were principally the following:—1st. Chancery suits amongst the adventurers themselves, arising from an illegal, or presumed illegal, sale of shares (but not affecting the title to the mines), which were obstinately contested for about 30 years, lessening the profits by above £200,000.—2d. In consequence of the above state of things (after the leases had run out), grants from six months to six months only could be obtained from the lords for working the mines—a circumstance alone sufficient to prevent the former adventurers from developing their wealth, or making the outlay which was absolutely necessary for removing the machinery and pitwork, which, from lapse of time, and mere wear and tear, had become unequal to its duty, but the replacing of which would have required an expenditure which no company whatever, as half-yearly tenants, could have ventured to incur.

There are numerous large tin and copper lodes, of ascertained richness and value, running through the whole length of this property, all of which can be made immediately available, and which, when properly worked, will return large profits to the adventurers.

The advantages which the proposed company will have over the former adventurers are numerous and important; it will suffice to mention the following:—They will acquire extensive works, far exceeding in value the sum of £50,000, to be given for them. There are large quantities of ore, which can be raised out of the ground already opened, when, by the erection of the machinery, the water has been drained to a shallow level; and a steady and constantly increasing supply can be afterwards kept up. There are large quantities of ore of an inferior quality, left by the former adventurers, in the various levels, from the surface to the bottom of the mine, neglected when tin ore was at the rate of £5 per ton, but which, with tin ore at £45 per ton (the present value being £60 per ton) will return a handsome profit. At the end of the period when the mines stopped working, the vast mass (or, as it is termed "More") of tin in the main lode, which produced such extraordinary returns, was left going down in the bottom of the mine as large and as valuable as it ever was. Under the improved system of mining which will be adopted (and mining was never so well understood, or so economically conducted, as at the present moment), great savings will be effected in the following items:

On the cost of materials £25 per cent.

On labour cost, from the use of a man-engine for conveying the miners without any useless expenditure of time and strength to and from the bottom of the mines 15 per cent.

On the cost of dressing the ores 20 per cent.

On the cost of drawing the produce to the surface, owing to the modern improvements in the machinery used for such purposes 50 per cent.

The proposed company will also have the benefit of long leases, enabling them to develop the resources of the mines in a lasting and miner-like manner. The levels already driven, shafts sunk, and ground opened at a great expense, will be of incalculable value in extending levels on the course of the lodes, and driving "cross-cuts" to intersect the parallel (or "side") lodes at different depths.

From the attention of the former adventurers having been engrossed by the amazing riches of their main lode, these side lodes, though proved to be exceedingly rich wherever they have been touched, were never worked to any depth. When this is done, the same rich discoveries may be expected as so recently rewarded the adventurers in the United Mines in Gwennap, where, under similar circumstances, the discoveries made in the side lodes immediately returned large profits.

Estimates, compiled from sources entirely to be relied on, show that an expenditure of £100,000 will suffice to bring these mines into a perfect and lasting working condition, which expenditure is apportioned as follows:

For machinery, including steam-engines of the highest power, for pumping, hauling, stamping, crushing, and a man-engine £43,000

Materials 12,000

Labour cost 25,000=80,000

Leaving for contingencies 20,000

£100,000

The returns, calculated with tin ore at only £45 per ton (the actual rate being now £60 per ton), are estimated as follows:

For the first year (while the drainage of the mines is proceeding) £20,000

For the second year 60,000

For the third year 80,000

And afterwards progressively, with a prospect of still further increase in subsequent years.

The mines are divided into 200,000 shares of £1 each, thus forming a sum of £200,000, of which £100,000 will be devoted as specified to bringing the mines into full and efficient working condition; £50,000 will be available for working capital; and the remaining £50,000 will be the consideration to be paid to the grantees, of which sum £7,000 will be paid in cash for the immediate expenses incurred by them, the remaining £43,000 will be paid in 45,000 paid up shares, which will remain under the control of the committee until dividends shall have been paid to the amount of 10 per cent. on all the shares of the company. This arrangement has been proposed by the grantees, in order to mark in an emphatic manner their confidence in the result.

The shareholders shall have the power, at their first meeting, to appoint two auditors, who shall also be shareholders, one of whom shall go out by rotation annually, but be eligible for re-election.

Reports from mine agents of character, capacity, and experience, and from practical miners who have worked in these mines for the greater portion of their lives, are appended to the prospectus, which may be obtained of the Committee, at the temporary office of the Company, 17, Gracechurch-street, City; or from the brokers, to either of whom applications for shares, in the annexed form, may be made.

FORM OF APPLICATION FOR SHARES.

Great Wheal Vor United Mines, No. 17, Gracechurch-street, City.

To the COMMITTEE.—GENTLEMEN: I request you to allot me shares in the above undertaking upon the terms of your prospectus, and I agree to accept the same, or such less number as may be allotted to me, and to pay the sum of £1 sterling per share thereon when required, and to abide by the rules, conditions, and regulations Name _____ Address and Occupation _____

Reference _____ No reference will be accepted unless it be given to a banker or stockbroker.

Date _____

Dues, 1-18th; Lease, 21 years.—In 10,000 shares, of 21s. each.

COMMITTEE OF MANAGEMENT IN LONDON.

JOHN EBENEZER DUNST, Esq., Cockspur-street.

GEORGE BURGE, Esq., Shaftesbury-terrace, Pimlico

JOHN SEYMOUR CARLIN, Esq., 17, Gracechurch-street.

BANKERS.—The Royal British Bank, Tokenhouse-yard, London.

BROKERS.—Messrs. Foster Brothers and Co., 27, Tokenhouse-yard, London.

PURSER.—D. G. Goostrey, Esq.

OFFICES.—75, CORNHILL, LONDON.

This mine is situated in the richest tin district of Cornwall, and joins the celebrated tin mines Great Wheal Vor and Great Work, in the junction of the granite and killas formation, where the greatest mineral deposits are invariably found. The deepest part of the mine is only 55 fathoms; whilst the adjoining mine (Great Wheal Vor) raised the greatest part of its ore below that depth, and it was rich at 300 fathoms from surface, and has given a clear profit of upwards of £500,000. This mine is to be re-worked by a new company with a capital of £200,000, in shares at 21s. each; whilst it is proposed to sell 6000 of the above 10,000 shares at 21s. each, which is considered sufficient to supply the requisite machinery, and to bring the mine into a most profitable and dividend-paying state.

Applications for shares to be made to Messrs. Foster Brothers and Co., Tokenhouse-yard; Mr. E. Tripp, St. Michael's-alley, Cornhill; Mr. H. Lascombe, Plymouth; Messrs. Hone, Barton, and Co., Dublin; Mr. T. Dewsberry, Bradford, Yorkshire; or to the offices of the mine, 75, Cornhill, where plans and prospectuses may be obtained.

A. LLSOPP'S PALE OR BITTER ALE.

The unanimous opinion of the most eminent scientific and medical men of the day, of Baron Liebig, Messrs. Graham, Hoffmann, Muspratt, Watson, Budd, Marshall, Hall, Travers, Ferguson, Rose, Vivian, Heygate, Leman, Arnold, Evans, Formby, Petrie, Macrorie, Rose, Tufnell, Hunter, Davies, Jones, Savory, MacLaine, Macaulay, Gray, Teevan, Hill, Hayward, Harrison, Pepper, Inman, Sir Charles Clark, the sanitary Commissioner of the Lancet, &c., in their after careful analysis, and all of them after long experience, having been pronounced in favour of the healthful and invigorating qualities, as well as the highly dietic properties of their PALE and BITTER ALES, Messrs. ALLSOPP & SONS do not feel themselves called upon to go into any further vindication of their justly popular beverage, from the aspersions of malicious and interested parties; but content themselves by announcing that they have constant supplies for the brewing of this season.

ALLSOPP'S PALE OR BITTER ALE may be obtained in casks of 18 gallons and upwards, from the Brewery, Burton-on-Trent; and from the under-mentioned branch establishments:—London, at 61, King William-street, City; Liverpool, at Cook-street; Manchester, at Duke-place; Dudley, at Burn Tree; Glasgow, at 115, St. Vincent-street; Dublin, at Ulster Chambers, Dame-street; Birmingham, at Market Hall; at which places a list of respectable parties who supply the beer in bottles and cans at the same price as from the brewery, may at any time be seen.

PRIGNANT CONSOLS SILVER-LEAD MINING COMPANY, CARDIGANSHIRE, SOUTH WALES.

Divided into 12,000 parts or shares of £1 each.—Subject to no further call or liability.

COMMITTEE.

WILLIAM SPOONER, Esq., Oxford and Cambridge Club

ROBERT GORDON, Esq., Bradwell House, Great Yarmouth

ALEXANDER DUNCAN, Esq., H.E.L.C.S., 11, Ladbrook Villas, Notting Hill

FREDERICK LEITCH, Esq., Walmer-court, Deal

ROBERT BLACKFORD, Esq., Albion Lodge, Leighton, Essex

THOMAS P. THOMAS, Esq., 75, Old Broad-street

BANKERS.—London and Commercial.

CONSULTING ENGINEER.—Mr. Matthew Francis.

AGENTS ON THE MINE.—Capt. Henry Tyack.

ATTORNEYS.—Mr. George Batters and Mr. John Wrench.

Solicitors.—Thomas Birch, Esq., 12, Warwick-court, Gray's Inn.

Prospectuses to be had of the secretary, Henry Watson, Esq., at the offices of the COMPANY, 3, GEORGE-YARD, LOMBARD-STREET.

OFFICES OF THE COMPANY.

The PRIGNANT ESTATE is situated over the great lode that is now yielding such immense fortune at Frongoch. The Ordnance map, on which Sir Henry De la Beche has traced the Cardiganshire lode, shows this large vein branching into two parts and running through the grant. The East Frongoch Mine Company are sinking a shaft on the crown property to the westward, and have erected a water-wheel for the purpose of cutting the lode at a depth of 30 fms., showing that they have strong faith in the bearing qualities of the vein there. To the eastward, the South Wales Mining Company are working upon the same lode, and some thousands of pounds worth of ore has been sold at one of their mines called Bodwel, upon it. There cannot be doubt that a very little outlay in open cross-cutting this grant will lay open the lode, and when it is understood that Frongoch Mine alone pays £13,000 a year profit, some slight estimate may be formed of the value of this set.

Prignant estate is situated in the parish of Llanfihangel Croxton; it lies about one mile south of the Devil's Bridge, one mile west of Bodwel Mine, two miles north of Logyals Mine, and one mile to the east of the celebrated Frongoch Mine, which rich lode runs through more than a mile of this property, and when opened on, will doubtless become one of the standing mines of the county of Cardigan.

WILLIAM GRIEVES.

London, Oct. 27, 1852.—Dear Sir: I beg to hand you herewith a hand sketch and some letters I have received touching the Prignant property, which, according to the more recent and careful inspection, appears to contain the Frongoch lode for a much longer distance than I expected, and, consequently, the setts much more valuable than I calculated upon. In addition to the celebrated Frongoch lode, it appears that this grant contains the lode of the Bodwel and Llanfihangel Mines, which, to the east of Prignant, has made a great deal of ore, and it is supposed that these will make very good mines, and as Prignant is nearer the Great Frongoch Mine, I believe that the veins will be found very productive in this sett. When I wrote you first, it was only a matter of theory that the Frongoch veins passed through Prignant; but the last letter from there puts the matter beyond the possibility of a doubt, as it states that one of the lodes has been found. While a note from Mr. Grieves (our agent at the Rhudiol Mines) says the lode passes through the grant for the length of a mile, which is quite sufficient for all mining purposes. In addition to this, a gentleman largely interested in East Frongoch and Bodwel, has applied to me to join a portion of his mining ground to our grant, affording sufficient evidence of the value of the mining ground along this range of veins. You will observe also that the East Frongoch shares have gone up to £9 and upwards per share, although they have not advanced in mining much further than ourselves, having erected a small water-wheel and sunk a shaft some 18 fathoms deep, but, like us, they have so far only seen the lode at the surface. You will, therefore, see that we are justified in valuing our grant highly. Henry Watson, Esq.

MATTHEW FRANCIS.

This valuable mine is held under a take note, with an agreement for a lease, from the Rev. W. H. Morris, at the very low dues of "for Cardiganshire" of 1-16th; the proprietors, having proved the value of the grant, retain for themselves half the number of shares, so only 6000 will be issued to the public. From the opinion of several eminent mining engineers, not more than £3000 will be required to make this mine equal to her neighbours, the Lisburne Mines, which, on a small outlay on 100 shares, are now making profits of £15 per share every two months, and are saleable at £50 per share.

Applications for shares to Edmund Soilleux, Esq., 33, Royal Exchange, and Stock Exchange, at the offices of the company, and of the following brokers:—John Watson Hamilton, Esq., 14, Waterloo-street, Birmingham; Luke Arnold, Esq., New Buildings, Small-street, Bristol; Edward Fox, Esq., 51, Dame-street; John Power, Esq., 20, Fowne's-street, Dublin; Munro Hugh, and Co., 4, North-street, David-street, Edinburgh; Charles Wilkinson, Esq., 2, Exchange-buildings, Hull; George Wise, Esq., 59, Albion-street, Leeds; Ebenezer Smith and Son, 1, George-street, Sheffield; George Fielding, Esq., 14, Royal Exchange Arcade, Manchester.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Prignant Consols Mining Company.

GENTLEMEN.—I request that you will allot me shares in the above company, on which I undertake to pay the deposit of £1 per share.

Name and surname in full _____
Residence _____
Description _____
Reference _____

OFFICE.—No. 3, HATTON COURT, THREADNEEDLE STREET.

PROSPECTUS.

This valuable and extensive SETT, situate in the parish of St. Endor, CORNWALL, on the main road to Truro, immediately adjoining the Copper Mine, and in the vicinity of the East Wall Rose, a well known silver-lead mine, if held under a lease for 21 years at 1-16th dues.

The Mine was worked under local management from 1821 to 1824, with an engine of only 24 in. cylinder, and with very successful results, as illustrated by the joined statement,—but after that period the general monetary depression that ensued destroyed, for the time, public confidence in all, even the most promising commercial adventures, and this mine was then brought to a standstill from want of the additional capital required for the purchase of machinery adequate to extend the successful working of it.

A large amount has been expended in driving adit and other levels, and sinking

engine and other shafts to the depth of 40 fms. from the surface; during those workings considerable quantities of copper and lead ore were raised, of a quality to command a high value in the market; the price realised for the copper ore at that time

was £100 per ton.

The following is an account of the ores sold in the year 1823:—

Price per ton. Amount.

January 2 54 t. 0 c. 0 q. £7 8 6 £109 19 0

March 6 48 12 0 8 12 6 419 3 6

April 10 31 18 0 6 10 0 207 7 0

May 1 33 6 0 6 3 6 208 19 1

June 5 48 16 2 6 0 6 294 3 4

August 7 70 18 2 7 11 6 336 1 8

October 9 72 0 6 8 6 462 12 0

Lead 1 17 2 12 2 6 22 14 8

December 11 52 12 0 5 5 0* 276 2 0

Total £2828 11 6

* This lot consisted principally of the refuse of the lode, which will account for the decrease in price.

Meetings of Mining Companies.

THE AUSTRALIAN MINING COMPANY.

A special general meeting of proprietors was held at the London Tavern, Bishopsgate-street, on Thursday, the 30th Dec., for the purpose of receiving the directors' report on the result of Captain Hitchins's inspection of the company's property in Australia, and to take all such measures thereon as may be desirable.

R. F. DAVIS, Esq., in the chair.

Mr. PLUM (the secretary) read the notice convening the meeting, and the following directors' report:—

At the annual general meeting in July last the directors reported, that as soon as they should have had the benefit of personally communicating with Captain Jehu Hitchins, on his return from Australia, an extraordinary general meeting would be called to consider the course to be taken for the further promotion of the interests of the shareholders. The written report of Captain Jehu Hitchins has lain at the company's office for some time, open to the inspection of the shareholders, and, with the specimens of ore brought by that gentleman, and exhibited at the same place, has afforded ample opportunity to all interested to become minutely acquainted with the geological character of the company's property, the estimate formed by Captain Jehu Hitchins of past operations, and his views as to the future.

This report will, therefore, only deal with the general conclusions founded on this document, and with the course of proceedings which, in the present extraordinary position of affairs in the colony, appear to be most advisable.

—As to the past, it is evident from Captain Jehu Hitchins's report, and also from other sources accessible to your directors, that the company's business in the colony, as well as their mining operations, have been carried on in a most extravagant and injudicious manner, and that under better arrangement much expense might have been saved, and far greater returns realised. It must, however, be satisfactory to the shareholders to be assured that the past extravagances have long since been effectually and finally arrested.

It is equally evident that the Tungkillo Mine has not been properly tried, and that there exists good ground for anticipating profitable returns from those operations which Captain Jehu Hitchins recommends, and which he believes may yet result in the discovery of remunerative deposits of copper ore, there being a considerable quantity of very rich ore in sight in maiden ground, that can be easily raised whenever the labour market returns to a normal condition. These operations are minutely indicated in his report, and their cost calculated after a close personal inspection.

The recent letters from Mr. Forster, the company's agent, corroborate Capt. Jehu Hitchins's views, inasmuch that so far as he has been as yet able to prosecute the trial workings referred to, the captain's most favourable anticipations have been fully realised, but the superior attractions of the gold fields were again suspending operations in copper mining, not only on the company's property but on every other mine in the colony; at the same time, Mr. Forster expresses himself with some confidence that the labour market will in the course of a short time become more favourable.

As copper miners, whenever circumstances allow the company to resume that character, it may be desirable not to rest exclusively on the Tungkillo Mine, but to obtain upon equitable terms some of the many mines of promise which are ascertained to exist in the colony; and here the company will derive great benefit from the attention given by Capt. Jehu Hitchins to his more general survey. Already the directors have secured the option of leasing a mine which offers fair prospects of remuneration, but which for reasons that will be readily appreciated, the directors abstain from describing more particularly at the present time.

During his residence in the colony, the improving value of the land attracted Capt. Jehu Hitchins's attention. Of the Allen's Creek estate, nearly all the portions have been already leased upon terms which, although favourable for the time, are likely to be materially influenced for the better by recent events, considering the very advantageous character and position of this property. The company's special survey at Reedy Creek, which extends eight miles from north to south, about four miles from east to west, and contains 20,000 acres, is more or less available for pasture or cultivation; a considerable extent appears to be suitable for dairy farms, the land generally being not overwooded, and certainly better watered than most other districts in the colony, on which account its value is highly estimated by colonists fully competent judge of its real character.

Had the company's prospects, therefore, remained in the state in which they were when Capt. Jehu Hitchins left the colony, the directors would probably have felt it their duty to the shareholders to recommend a longer exercise of patience for the natural development of the value of the land and the prosecution of such researches in mining as the state of the labour market might allow, but since his departure from the colony an entirely new state of things has arisen. Remunerative gold fields have been discovered, so near the company's property as to induce the expectation that it may be found upon the company's land, or in such proximity to it as to affect its value most materially.

As already stated by the last accounts, it appears that copper mining had been again nearly suspended, but it is most gratifying to perceive that, although the miners refused to engage for more work at copper, they so far viewed favourably the prospect of your property producing gold, that they had agreed with Mr. Foster, when their engagement at copper mining ceased, to commence a search for gold, under his direction, in various parts of the company's land. In any case, it must be evident, the company cannot fail to participate in the general advantage of the gold discoveries, and more especially having an active resident agent, prepared to avail himself of every opportunity for promoting the company's interests; and this leads the directors incidentally to notice to you how favourable a position the company occupies as compared with many others.

It will be in the recollection of the shareholders that a large expense, not less than £3000, was incurred in the purchase and erection of stamping machinery at Tungkillo—an expenditure incurred in times when labour was at a moderate price, and machinery could be procured in a reasonable time, and purchased at a low rate. This machinery, your directors are happy to say, is perfectly applicable to the stamping and reduction of gold ores; is situated on the borders of a never-falling creek, and worked by a powerful steam-engine. Your directors believe there is but one other stamping-engine in all the Australian colonies, and that is possessed by the Burra-Burra Company. To manufacture in England, and set to work at any of the gold fields in Australia, similar machinery would at the present moment require time and cost scarcely admitting of any approximate calculation. The company have also in store at Port Adelaide, a 16 in. cylinder steam-engine, and crushing machinery ready to be fixed in any suitable locality, and so large a stock of mining implements that their agents are quite prepared to enter at the very first favourable opportunity on active operations in gold or copper mining, as may be found most suitable, without requiring supplies from England. The directors, therefore, propose to avail themselves, for the benefit of the company, of the highly favourable circumstances indicated; to hold themselves in readiness to work either gold or copper mines in connection with the resources of their present property, and not to neglect any of those accessory operations, such as the purchase of gold dust and the reduction of gold ore, which promise profit, and will be entered upon as circumstances may render desirable.

In fact, whilst abstaining from costly dead work, to enter upon such business as may promise a speedy return, and for which their past experience and their position in Australia gives them advantages possessed by few others.

The directors cannot close this portion of their report without alluding to the very highly satisfactory way in which Captain Jehu Hitchins has fulfilled his mission, both in protecting the company's interests, and in reporting upon their property generally; and it affords them pleasure to hope that his services may be made more extensively available for your interests.

The same opportunity enables the directors to inform the shareholders, that the very favourable opinion they were led to form of Mr. Forster has been in every way borne out by their further experience, and they have again to record their high sense of the valuable aid they have received from Mr. Robert Devonport in the colony.

Under the 14th section of the company's deed, the directors are empowered to apply for a charter or an act of incorporation. The expediency of applying for the former has for some time been the subject of consideration; but with that caution which they trust has guided all their acts, the directors have deferred doing so until they were in a position to make this present report. The late interregnum in the political world has somewhat interfered with their intention in this respect, but the directors trust, at no distant period, to have to announce the company as incorporated under a royal charter.

The CHAIRMAN said, it was with much pleasure the directors met the body of proprietors on the present occasion, and on its being in their power to lay before them so satisfactory a report, indeed more so than any preceding year. He believed it would be allowed that, whatever they had held out as to after proceedings, had been borne out by subsequent circumstances; they stated that they would reduce the expenditure to the utmost possible minimum, and they had done so; that they would make a thorough investigation into their affairs—they had done so; that they would send out a competent and active agent, to inspect the entire of the company's property, and they had done so; and the voluminous and valuable report of Captain Hitchins, which had been for some time lying on the office table for the inspection of the shareholders, and which they had, no doubt, all read, was highly gratifying. Subsequent reports from their resident agent, Mr. Forster, most fully bore out all that Captain Hitchins had there stated, and it was evident that their property was of the most valuable character. Although, for the want of labour, their copper-mining operations were suspended; from the fact of gold being discovered within seven miles of their property, it was highly probable they should discover it in their own grants; but heavy rains had, up to last advices, prevented the proper researches being made. The gold companies established in London had gone to enormous expense for the necessary machinery, while they had the means of crushing 30 tons of auriferous quartz per day, should it be found in their vicinity; he believed, at present, theirs was the only stamping power in the colony, except the Burra-Burra; and that they might defy competition in that particular description of business. The chairman then took a thorough review of the report, and in answer to Mr. Anderson, said their finances were in an easy position; they were not in want of money; it was true, they had the liabilities of their loan-notes to meet; but he was happy to say several of the largest holders were willing to renew at a reduced rate of interest.

Mr. ANDERTON said, he believed he had attended every meeting of the company; and he must honestly say he was never so much pleased at their position and prospects, or with any former report as on the present occasion. He had no doubt their property under former management in the colony had been shamefully neglected, and thus the shareholders had been robbed; and he thought they were greatly indebted to the directors for bringing them into their present position.

Mr. ASHWELL was also highly pleased with the report and with their present prospects; but had hitherto been much disappointed. He had from the first held several hundred shares, and should certainly endeavour to increase the number. The real value of their property had yet to be developed. The River Murray, the finest in South Australia, flows a few miles south of their property, and a project was now on foot for rendering it navigable to a considerable distance above; and this in conjunction with the railway, which would shortly be completed, from Adelaide to the port, would render them incalculable advantage, and greatly increase the value of their land. They had been some time since recommended by Capt. Hitchins to divide their arable land into farms of 500 acres each, which they could let at £60 per annum, thus producing an income of upwards of 2000/- a-year from this source alone; what, then, would not be worth when Adelaide, the depot from which the principal supplies of the colony must flow, was brought into almost immediate approximation? If they found no gold on their land, their copper mines and farming land would, he felt sure, under proper management, make them a good return.

Mr. BRANDY had, for a long period, taken great pains to arrive at a knowledge of their true position, and took a similar view.

A PROPRIETOR enquired if any iron ore had been discovered on their property, and whether it was in contemplation, at any future period, to manufacture iron?

The CHAIRMAN said, there certainly was ironstone of the most valuable character on their estate; but as to manufacturing iron, that must be left to private enterprise, which at a future day would doubtless be directed to it. They had had sufficient warning by the fate of iron companies here to attempt it.

Mr. ASHWELL said he had been informed, on good authority, that in Sydney there was 1,000,000/- sterling hoarded up for the sole purpose of purchasing land, of which no doubt they should reap some benefit.

After some conversation as to the supply of labour, thanks were voted to the chairman and directors, Captain Hitchins, Mr. Forster, and R. Devonport, Esq., the latter gentleman as a resident of the colony, having lent valuable assistance, when the meeting broke up.

CALLINGTON MINES COMPANY.

At the bi-monthly meeting of shareholders, held at the offices, Salvador House, Bishopsgate-street, yesterday, PETER STAINBURY, Esq., in the chair,—the notice convening the meeting having been read, the report from the agent followed:—

December 26.—South Mine: The rise in back of the 125, on the lead lode, is up 5½ fms. The winze sinking below the 112, against this rise, is now sunk 4½ fms.—we hope to make a communication here by the middle of Jan., then we shall have some profitable tribute ground laid open and made available. The incline shaft is now sunk 24 fms. below surface, the ground is not so favourable as last reported, there being much spar intermixed with the killas, or clay-slate; no lode has been taken down since last report. The lead pitches are much as usual. Kelly Bray shaft is now sunk 3½ fms. below the 70—ground favourable for sinking, and now set at 15f. per fm.; the lode is 3 ft. wide, composed of spar, muriac, blonde, and good stones of copper ore. The 70 cross-cut north is now driven 19 fms., the ground is still very much mineralised, there being several branches intersected in the last 2 fathoms, all dipping north, which indicates that we are nearing the lode; the lode in the 70 end east is 1 ft. wide, yielding 1 ton of copper ore per fm., worth 5/- per ton; the lode in the 70 back stope is 2 ft. wide, yielding 2 tons of ore per fm., worth 5/- per ton. The lode in the 60 end east is 1½ ft. wide, yielding 2 tons of ore per fm., worth 4/- per ton. The copper pitches are just as usual. We intend sampling a parcel of copper ore on Friday next at Cotehill Quay, about 70 tons. We shall, also, have made marketable by the end of this week a small parcel of tin, about 1½ tons, of good quality.

After which the financial statement was submitted:—

Balance of last account	£1538 2 0
Cost for Sept., 643/- 3s. 10d.; Kelly Bray, 189/- 9s. 7d.	832 13 5
Ditto Oct., 573/- 3s. 10d.; Kelly Bray, 262/- 9s. 11d.	775 4 9
Interest and discounts	34 13 7 = £6180 13 9
Copper ore sold from Kelly Bray, 237/- 1s. and 267/- 10s. 8d.	505 6 8
Silver-led held 3d November	423 12 7
Sale on 29th Sept. of steam-engine and old materials	1595 18 11
Thirty-third instalment, made 30th Sept., of 10s. per share	2300 0 0 = 5024 12 2

Showing debtor balance £1156 1 7

It was resolved that the report and accounts submitted be passed, errors and omissions excepted, and that a call of 5s. per share be made payable to the treasurer on or before the 18th Jan., to liquidate the balance.

A discussion ensued, when it appeared that four or five parties had not responded to the last call. It was, therefore, resolved that, in accordance with rule 18, a special meeting be convened for the 19th Jan., for the purpose of forfeiting all shares upon which any call or calls then due shall remain unpaid.

Mr. THOMAS WATSON observed that the shaft at Kelly Bray is sinking below the 70 fm. level at 15f. per fm., the cross-cut gone through 19 fms. of highly mineralised ground, and the prospects generally had materially improved. A call of 5s. per share would clear off all the liabilities; he would, therefore, advise one to be made forthwith, and the few in default of the last receive due notice thereof.

The meeting terminated with the usual compliment to the chairman, and the parties separated.

CWMDOYLE ROCK AND GREEN LAKE COPPER MINING CO.

The bi-monthly meeting of shareholders was held at the Queen's Arms Tavern, Cheapside, on Thursday, the 30th of December.

JOHN WEBSTER, Esq., in the chair.

Mr. HENRY PALMER (the purser and secretary) read the notice convening the meeting, which had been forwarded to every registered shareholder—it being the intention of the committee for the future to observe the latter practice, they having no means of compelling shareholders who had not registered to do so, and, therefore, could not recognise them in any other way.

The CHAIRMAN read over the minutes of the last meeting, held on the 21st of Oct., which were unanimously confirmed. He then read the balance-sheet as follows:

Balance, as per last statement	£ 1 14 4
Received for deposit and arrears on shares	184 18 6
Premiums received on 112 of the above shares	234 0 0
Temporary loss	180 0 0
Received from manager and purser on account of shares	50 0 0
Salary charged for services, but not received by them	185 8 0 = £2796 0 10
Credited last account for 37 shares, not delivered, and still in the capital stock of the company	£ 37 5 0
Paid October cost	267 11 7
Paid November cost	451 7 9 = 786 4 6

Leaves balance to next account £ 9 16 6

The liabilities being—Temporary loan £180 0 0

" " One year's interest on preference shares 720 0 0

" " Current cost for Dec. and Jan. 560 0 0 = 1460 0 0

Mr. SOWELL observed that there were very great irregularities in the preceding accounts; and he did not approve of the manner in which they had been kept. He trusted they would henceforth start correctly, and maintain the system. He was not a registered shareholder at the last meeting; and required now to know whether the 6000 shares paid-up stock were entitled to receive 720/- per annum, as announced in the Mining Journal!

The CHAIRMAN said, certainly. He was at the mine about ten days since, and witnessed the first shipment of 26 tons, which he had since ascertained had arrived safely at its destination, and would shortly be disposed of. All had progressed in the most satisfactory manner; but he was sorry to observe that the storm of Sunday had done very serious damage to the launders, and other surface erections, making a perfect wreck of them. He would now read Capt. Colliver's report:—

Since the last meeting I have been engaged in getting various surface erections complete for the more speedy mode of rendering our ores marketable. I had several obstacles to surmount during the first month, as I was in great want of proper materials conveyed on the mine previous to the arrival of our own horses and carts. The weather has been so very boisterous that we have been for many days not able to do anything at surface; but I am happy to inform you these obstacles are now nearly all surmounted, and I hope the period is near at hand of our making large and regular returns of ore, of which we have a large quantity accumulated throughout the mine. We have now the incline laid down to No. 1 level, the shoots to Price's to No. 5 level; in this we have made a large floor for the reception of the ore we have broken in this and No. 6 level; also walled up a large shed for the convenience of the dressing, made a new floor in No. 2 level, completed the new cottage, cleared and laid the foundation of a large cart-house and store room at Penpass, and repaired about 500 fms. of road. The excavations for the new wheel-pit I purpose commencing, so that the masons may begin their work at once. Our underground operations have been stopping 110 fms. of ground, driving 10 fms., and sinking a winze 11 fms. The mine never before presented a more favourable appearance. The lodes throughout the different stops in No. 1 level are yielding ore of fair quality. In No. 2 level we have a lode 2 ft. wide in the back, 6 in. of which is solid copper. The lode in the end is 1 ft. wide, 6 in. of which produces copper of first quality. At Pasco's, in the winze we have a lode 3½ ft. wide, with good stones of copper; the stopes throughout this level are yielding some very good ore. In Price's level we have cleared out the bottom, and commenced sinking a winze from this level to Pasco's, on the course of the ore ground; in case of these two winzes being sunk to Pasco's, we shall then open out about 600 fms. of very productive ore ground. In No. 1 stop we have a lode 5 ft. wide, good saving work. In No. 5 level we are driving, and have a lode 4 ft. wide, producing good copper about the point of the present end; we have a winze coming down from No. 6 level in a fine course of copper. I shall as early as possible communicate these levels; when done, it will open out backs to the height of 25 fms. of good ore ground. In No. 6 level the two inner stopes are yielding a large quantity of ore; in No. 1 we have a lode 2 ft. wide, good work throughout; in No. 2 we have passed the disordered ground, and have a lode 4 ft. wide, 1 ft. nearly solid copper. The copper that has been broken from these stopes and No. 5 level has not yet been dressed; we have now a large quantity accumulated, and as we have the floors now laid out I anticipate good returns from these two levels. The new 53 ft. water-wheel, and 36 heads of stamps, Mr. Thomas is proceeding with as fast as possible. In conclusion, I beg to say when the mine is laid out as proposed, and the stamping power we now have ordered erected, I doubt not but that we shall have a mine which will be second to none.

He next read a subsequent letter, and the report of the committee, which need not be particularised, as it was an echo of the foregoing.

The CHAIRMAN then announced that the committee recommend a call of 1/- each on the deposit shares, to discharge the present liabilities and carry on the necessary operations. They required a further supply of horses and carts. They were erecting a 23 ft. wheel, with 30 heads of stamps, and which would go to work in March next; it is situated on the head of the stopes, at the Greenlake Mine, where 500 tons of stuff lay at grass, awaiting its completion. As there was no convenience within five miles of the mine, they could only at present accommodate 50 miners, and as they contemplated employing more, suitable dwellings must be provided for them.

A SHAREHOLDER enquired how many of the deposit shares remained unappropriated?

The CHAIRMAN observed about 1200, as 1000 had been that day appropriated at par, on condition of using a patent for crushing ores. The reports and accounts were then unanimously received and adopted.

Mr. O'DONOHUE observed that many of the shareholders understood that the 720/- interest was not payable until the deposit shareholders had received dividends to the extent of 10 per cent.

The CHAIRMAN explained that one year's interest was now due, and must be forthwith paid; when the deposit shares had paid up 2/- it would cease. Capital was required to prosecute the mines, and the proceeds of ore sold would create a dividend fund. He would now read the 12 rules and regulations which were to govern the company henceforward; they were strictly in accordance with the Cost-book System.

They were accordingly read and unanimously confirmed. It being in the power of shareholders jointly holding 500 shares, at any time to call general meetings for any special purpose.

Mr. LYCWITH rose to propose a call of 1/- per share on the deposit shares, which was seconded and carried unanimously.

The CHAIRMAN then stated that the committee proposed placing the parties who had purchased the 112 shares at 2/- prem., on an equal footing with the party who had purchased the 1000 shares, by giving them 224 additional shares, and then distributing all that remained *pro rata* among the shareholders. A long discussion ensued upon this subject.

Mr. O'DONOHUE stated that he represented several working men who had embarked their money under the impression that, by

THE MINING JOURNAL.

SOUTH AUSTRALIA—ITS STATE AND PROSPECTS.

[FROM OUR OWN CORRESPONDENT.]

ADELAIDE, AUG. 12.—Scarcely a couple of months have elapsed since I gave you my opinion that before Christmas we would probably have received one million sterling from our South Australian diggers at the Victoria gold fields. I am in a position to-day to give you another proof that in my reports from here I am always anxious to avoid anything approaching exaggeration, or open to refutation. The million is *un fait accompli* at the very time I am writing. The Assay Office receipts, as you will perceive below, exceed, up to this date, 900,000*l.*; and yesterday our fourth escort arrived safely, with 100,000*l.* more gold dust! I may as well begin by giving you the amount of gold dust deposited in the Assay Office since I last wrote.

Amount deposited up to 23d July.	£747,549
Deposited on July 23, 8,537 ozs.	30,308
" " 27, 6,795 "	24,124
" " 30, 9,146 "	32,470
" August 3, 5,530 "	19,637
" " 6, 4,413 "	15,667
" " 10, 9,184 "	32,605 = £902,560

Add some few lots, the depositors of which were absent at the proper time... 1,278

Total deposited up to 16th Aug. £903,838

Next I have to inform you, that this dear little colony of ours—this, by our neighbours, despised South Australia—has had the distinguished victory and triumph over the prejudice, ignorance, and something worse, displayed by both New South Wales and Victoria when our precious Bullion Act first came into operation, by seeing a strong party in both those colonies advocating the establishment in their respective commercial capitals, Sydney and Melbourne, of the identical assay office which has effected such marvellous results in this colony, and enabled South Australia to rise like a phoenix from the ashes of approaching ruin to a position third only in importance in the accumulation of gold to Sydney and Melbourne, the present great outlets of the El Dorado. A portion of our neighbours, I say, advocate now, might and main, the adoption of the principle, but as yet they are only talking about it, and for energetic action they are now, as ever they were, immeasurably behind South Australia. It is excessively amusing to watch the proceedings of the several legislatures there, to see how anxious they are so to disguise their arguments that no one may suspect they have taken a leaf out of our book. In Sydney, it is given out by the leader of the House "that the measure proposed to be introduced there must not be mistaken for the Bullion Act passed by South Australia." In Melbourne, they go a step further, and honourable members in that house very complacently assure each other, and the public out of doors, "that neither the colony nor the Legislature of South Australia are a fit model for them to imitate!" Of course not! But disguise it as they will, the principle is the same—viz., assaying the gold, and making the ingots a legal tender, and the basis of a paper issue! But as the introduction of such a measure in those colonies would give a fatal blow to all the tribe of speculators who are now fattening on the low price at which the poor fellows who produce the gold are obliged to sell it, and as you can easily imagine that the said speculators form by this time a very numerous and powerful body, the whole mercantile and banking interest in those two cities being engaged chin deep in the profitable business, the greatest opposition is being raised to it, and there was little chance of its being carried, when all of a sudden the arrival of the Peninsular and Oriental Steam Navigation Company's steam-ship *Chusan*, at Melbourne, with dates to 14th May, brings the intimation that her Majesty's Government has the most favourable disposition immediately to establish a royal mint in one or both of those places. The diggers, now generally called the "new aristocracy," have, therefore, the prospect of very soon being able to realise the full value of the article they are producing in such amazing quantities. But even here, again, we are beforehand with them all, seeing that the gold from our own men is arriving now in Adelaide in a steady and increasing stream, at the rate of from 50,000*l.* to 60,000*l.* sterling per week, or 3,000,000*l.* sterling per annum!

Seeing, also, the utter physical inability of our local banks to procure and sign for circulation a sufficiency of notes equal to the demand, our active community have for some weeks past been agitating the necessity of establishing a mint here, and it is now certain what I merely foreshadowed in my last letter, that the establishment of a mint in Adelaide, distinct and independent of any or either that may be established in Sydney or Melbourne, will not be postponed beyond the period which may be actually required to get together the necessary establishment and machinery. Our Legislative Council meets in about a fortnight, and you may depend upon it that the members will not leave the walls of the House when once they get inside it, before they have taken such steps, and passed such measures, as may be necessary to secure to this colony a full measure of the advantage to be derived from our happy proximity to the gold mines, and the well ascertained attachment the thousands of South Australians now at the diggings feel for this colony. With the overland escort, now well established and most efficiently conducted, between Adelaide and Mount Alexander—with our own commissioner permanently stationed at the gold fields to receive into his custody the gold from the South Australian diggers as fast as they raise it, to transmit by the escorts—with the navigation of the River Murray (our own noble river) on the point of being opened by steam, which will enable us to send provisions, &c., to within 40 miles of the diggings by water carriage—I say, with all these advantages already assured of, is it likely that we will sit down quietly and see the neighbouring colonies derive all the benefit from the labour of our sons, which would be the case if we did not continue to offer them equal, and greater advantages here by coining the gold for them, and thus insuring its investment in this colony? Whatever inconvenience some of our industrial pursuits may have to undergo from the great abstraction of labour which has taken place, and will continue to fluctuate backwards and forwards for some time to come, we have nothing to fear for the future, as long as we enable them to realise their earnings here, where all their local attachments we now know bind them to return. But if gold were only to be coined in Melbourne, there would be too much fear that, once having got the sovereigns on the spot, many might be induced to leave us altogether. A mint we, therefore, must have, and what is more, looking to antecedents, and the determination with which South Australia has overcome the most formidable difficulties that have in our short history threatened to crush our nascent prosperity, from the days when we knocked on the head the royalty tax on minerals to the day when, in the early part of this year, we overcome the reluctant scruples of our Government and passed the Bullion Act, I may add, a *mint we will have*. Mr. Babbage, our very efficient superintendent of the Assay Office, has this week given in to the Government his estimate of the probable cost of establishing a mint here, from which official document it appears that he will undertake to issue 6,000 coined pieces daily, at a total yearly expense (including the present expense of the Assay Office) of 18,000*l.*—or, say 20,000*l.* The Government charge upon gold dust passed through the Assay Office is 1 per cent., and produced in the month of July 240*l.*, so that the charges of the additional establishment will probably enable the Government to carry out the plan without any further deduction.

The immediate consequence of the certainty which now exists that the enormous quantity of refined and assayed gold held by the local banks will, at an early period, be turned into coin here, and thus relieve the banks of the necessity to import sovereigns from England and ship ingots home, has not alone removed from the two banks that have worked our Bullion Act from all anxiety respecting their extended circulation of notes, but assures them, what they richly deserve, of a very large profit. The gold which they have taken at 3*l.* 11*s.* (which price our *dear* neighbours at the time declared to be stark staring madness to give), they will now be able to get coined here, and re-issue at 3*l.* 17*s.* 10*d.* an oz.! The South Australian Bank, which holds by far the largest portion of the gold, it is estimated will, before the expiration of the Bullion Act, and the commencement of the coinage (when, of course, their profit from that source will cease) clear 100,000*l.* on the gold they will at that date have in their vaults—equal to half the entire present paid-up capital of the corporation; and the fortunate shareholders of this bank, who, when they first heard of the difficulties which fell upon this colony, were no doubt quaking in their shoes, and wishing themselves well out of them, will, like magie (for these astounding occurrences now taking place in Australia are magic of the purest water) awake to the happy consciousness of their shares being worth double what they were at the commencement of this year. Now, mark the change which has come over the dreams of the Bank of Australasia, which has hitherto doggedly set its face against the Bullion Act, and earned for itself undying notoriety in consequence; now, that establishment has suddenly found out that it is after all not such a losing game to sue 1*l.* in paper against 1*l.* sterling of refined gold, worth 3*l.* 17*s.* 10*d.* an ounce, but only valued to the banks at 3*l.* 11*s.* an ounce. The mana-

ger's face is now decked with the blandest smiles whenever he meets a digger; he has actually discovered that he can allow cheques on the other two banks to be paid into his bank without fear that the Bank of South Australia and the Union Bank will not be able to give value for them, which he thought once, as he refused to take them, and he is as anxious now to carry out all the provisions of the Bullion Act as he showed temerity in repudiating it, after his most respectable and scandalously ill-used predecessor in the management had agreed to co-operate with the other two banks to carry it out. When the real facts of the case are once fairly before the proprietor of the Bank of Australasia at home, when the losses this bank has sustained in consequence, the amount of custom which has slipped through their hands and gone over to the other two establishments, the scorn felt for that bank by our public, and (to which shareholders are peculiarly sensitive) the amount of profit the bank might have made but has not made, is once fairly made patent to the London shareholders, who have it in their power to ferret out all these things if they like, they must be strange people indeed if they do not tardily but surely come to the conclusion that when they superseded the respected, experienced, and judicious Mr. MacDermott in the management of that branch in this colony, they committed an act cruel to that gentleman, and one productive of certain and great present losses to the proprietary, as well as loss of *prestige* to the branch here, which, as far as future profits is concerned, is sure to be attended by a great diminution compared with what that profit would have been had the confidence of the public not been rudely shaken by the occurrences of the past six months. Notes of the Bank of Australasia, which had almost entirely disappeared from circulation, are now being again freely issued, and the customary exchanges between the three banks re-established on the former usual footing.

The *Charlotte Jane*, which sailed lately from here to London, took the richest freight which ever left our shores—40,000*l.* worth of copper, and 4,300 ozs. of gold; total value of both together about 230,000*l.* Capt. Hitchins, who was sent out by the Australian Mining Company to inspect the Tungkillo Mines, returned home in her; so you will probably soon hear his official report of that property. I know pretty well what it will be, but I shall leave it to speak for itself. Mr. Matthew Forster, the present manager here, has taken a mineral lease from Government of 80 acres, at Mount Middleback, far up in Spencer's Gulph, at the yearly rent of 40*l.*; the specimens brought in from there are very promising—some (the grey sulphuret) having turned out on assay 75 per cent. The Patent Copper Company's furnaces continue in full work; they are apparently under no apprehensions for want of labour. The Burra Burra is also going on steadily; and although they feel the want of labour at grass, to clean up the low produce stuff, still the underground operations do not suffer for want of hands. The monster engine is nearly ready to be set to work; probably about the 1st Sept. it will commence forkuting out the water, and from the bottom of the new sump, in the 50 fm. level, the most magnificent specimens from a lode of red oxide and ruby copper (all but pure copper) are now being shown at the office. The steady old miners appreciate the benefit of plenty of profitable work and comfortable homes; and although many, no doubt, have tried the gold diggings, and may try them again, they leave their families behind, and are sure to come back again. They have at present some 180 underground men at work.

Your old acquaintance, Mr. Evan Hopkins, is reported in the papers to have purchased the goodwill (lease) of a squatters' run in Victoria, for the sum of 10,000*l.*; 5,000*l.* cash and 500*l.* draft on England, but without the live stock, the former proprietor having the option of leasing the run again at the annual rent of 500*l.* per annum. I hear from parties returned from there that he intends erecting his machinery on this run, and to cart the soil from Mount Alexander to it, some few miles off. You will understand that his buying this run gives him no more right to the fee simple of the land, or to any gold he may find on it, than you have.

The following is the quantity of gold already shipped from here to England:

Albatross	02s. 12,000	£42,000
Sophia Maffatt	16,396	51,322
Sibella	12,017	42,000
Water Lily	200	700
Charlotte Jane	48,179	169,123 = £305,345

A very large proportion of this is in gold dust, and has not passed through the Assay Office, so that the real amount already far exceeds 1,000,000*l.*, as our share of the spoils from the gold-fields. I add a few other interesting statistics.

Exports of produce of the colony for six months ending—

	25th June, 1851.	25th June, 1852.
Wool	£108,975	£109,382
Copper	130,348	114,035
Regulus	4,650	11,270
Copper ore	80,294	142,286
Lead ore	1,072	
Grain and flour	27,118	66,836
Farm produce		6,582
Tallow	3,619	2,075
Animals	98	2,310
Sundries	2,000	10,063
Total	£358,139	£464,870

Imports re-exported during the same period—1851, 20,120*l.*; 1852, 265,604*l.* Custom-house revenue for the quarter ending 25th June, 1851, 22,299*l.*; 1852, 19,342*l.*: showing only a small falling off of 295*l.*

We are now in daily expectation of the arrival of the *Australian*, the first of the mail steamers. If she left on the 2d of June she will at this date have exceeded the period (67 days) fixed by our Legislature, to entitle her to the bonus of 400*l.*, if she landed her mail here in that time. The immense rush which is now taking place to Melbourne will, no doubt, in the first instance, indispose the steam companies to allow their steamers to call here on their way to Melbourne, as was shown by the *Chusan* going on without stopping. We must bear with this disappointment, in the first instance, but after the present altered condition of South Australia is known in England, where many probably think us entirely ruined, this will no doubt be altered, and the steam companies will find our legislature will deal very liberally with them, and award to their steamers such a bonus as may induce them to give us our share in the advantages of the new era opened to us by this steam communication.

It is intended to go on at once with the works of the railroad which is to connect the city of Adelaide with the port (seven miles). A portion is already substantially fenced in. A shallow-draughted steamer is now being built in Sydney, for the navigation of the River Murray. Our Legislature gave Captain Cadell the very handsome bonus of 250*l.* on her reaching the Darling, and she is to enter the river by the sea-mouth of the Murray, and be ready for her first trip in November next.

ADELAIDE, SEPT. 14.—The first intelligence I have to give you to-day is the realised discovery, on the 21st August, of an undoubted gold-field in this colony, in the stringy bark ranges, 23 miles from Adelaide. The cry of "wolf" has been so often raised here, that every one was incredulous until the official report of the Colonial Secretary appeared on the 24th August, which placed it beyond doubt. The spot is near Echunga, where Mr. Jacob Hagen possesses 3,000 acres of land, as well as the South Australian Company, and other proprietors now in England other portions. The diggings, therefore, go by the name of Echunga Diggings. Two persons (Mr. Chapman and Mr. Hampton) conjointly claimed the reward offered last year by the council, of 1,000*l.*; they are returned diggers, and were, in common with every one else who has visited the Victoria diggings, struck with the similarity of the country between the two places. The excitement in Adelaide, after the news was first promulgated, beggars all description; hundreds upon hundreds went out to see it—cradles rose from 30*s.* to 5*l.*, and were not to be had a couple of days after even at that price, and tin dishes, picks, and spades the same; the most unconscionable prices were asked by everybody for everything. The people were decidedly mad, for the time being. In two or three days, however, the rain came down in torrents, which quickly cooled the ardour of most of the diggers, as they were totally unprovided with the usual outfit, and numbers returned to town. Then, again, although you could not take up a spadeful of earth and wash it without finding some portion of gold in it, the men soon became discontented, because they did not immediately find lumps as big as their heads. This is also just about the time when most of our adult male population had made all their preparations for a second visit to the Mount Alexander gold-fields; and as a great number of them had been very successful at the latter place, they would not forgo their chance of again doing well at a place where gold had been found in large lumps and quantities, for the sake of spending the present fine season at the Echunga diggings, where the gold, as far as yet known, is more minutely distributed. Our gold-fields are, therefore, at the date I am writing, at a great discount with the people here; and the extreme excitement has been followed by as extreme a disappointment. I do not intend, therefore, to-day to enter into any full details on this subject, as

I have a decided objection, at all times, to give statements which might afterwards turn out to have been too sanguine or exaggerated.

It is enough to record these facts—1. That gold of precisely similar a description to that found at Mount Alexander and other places has been found near Echunga, in the surface soil and gravel, minutely though widely distributed.—2. That the kind of country in which this discovery has been made (as yet only in this locality) extends in length some 60 miles, by from 10 to 20 miles in breadth.—3. That the gold, although minutely distributed, is not confined to dust, but that nuggets, varying in size from 1 dwt. to 3 oz. in weight, have in many instances been found.—And 4. That the official assay of the gold at 23 1-16 carats of gold, 2 of a carat of silver, and a little iron, thus proving it to be of first-rate quality, having no trace of copper in it, which the Mount Alexander gold has. Whether other places will now be found in which the gold is deposited in large and remunerative quantities is a problem yet to be solved. I have no doubt that, sooner or later, it will be so found, and have recorded my opinion in my former communications to you; and although I cannot report to you, with anything like truth, that the aggregate quantity of gold found at Echunga by all parties, of which I have been able to collect credible data, exceeds 150 ozs. up to this date, still this quantity I can vouch for, and if it proves nothing else it proves this, that we have great reason to hope this is only the first link of grander discoveries to be hereafter made, when our people, who have been spoilt by the riches of Mount Alexander and Bendigo, shall give themselves the trouble to institute a more systematic and vigorous search for it throughout the stringy bark ranges and gullies. In all these discoveries, the tendency of parties writing to England about them is inclined to exaggeration, and you will no doubt appreciate the moderation with which I announce this important discovery to you. You may rest assured that I will keep your readers well informed, the moment authentic discoveries of a more important nature occur. One peculiarity this gold possesses different from the Victoria gold is, many of the particles are fine threads and thin shavings as it were, from the smallest size to an inch and an inch and a half in length.

The winter being now past, and the most lovely spring weather prevailing,

our male population is now again on the move for Mount Alexander. In a couple of months time, the greatest part of what formerly was our working population will have left for Melbourne, and although all fears of their stopping there altogether are now allayed, nevertheless, as a working class of people, they are spoilt for the future; those who have done well (and their name is legion) will, when they return, be employers of labour themselves; those who have not done well will come back discontented, and consequently reluctant to settle down again to common day work at moderate wages. The terrible revolution this has created in all our industrial pursuits is beyond belief to you in England, who are accustomed to get easily any species of labour you may require. The shearing season has commenced this week, and it is extremely doubtful whether one-fourth of our sheep will be shorn, and if shorn whether men can be found to drive the team bringing the wool to the port for shipment. The crops are looking magnificent, but whether there will be any one to gather them in at Christmas is equally uncertain. This is a dreadful state of things; the most exorbitant prices are asked for any article of clothing or of daily domestic use which require hand labour; and if this state of things is to continue during 1853 a great many people will be ruined. Tons of gold may accumulate here, but that will not save those whose wool is to rot on the sheep's backs, and whose corn may become the prey of the wild fowl, for want of hands to collect it. And future historians who record this astonishing state of things as obtaining in one portion of the British empire, will also record that in Great Britain itself thousands are in distress, who would be invaluable here, but are unable to come. Verily, those in power have much to answer for! It appears to me that the first duty of the Legislature should be to provide for the wants of those who cannot provide for themselves; and would it not be much better for Parliament at once to consider and adopt some grand and comprehensive system of emigration to these colonies, by which the perpetual drain on the English Exchequer for the support of those who cannot support themselves will be done away with, and a new and large class of consumers of British manufactures created, which will give additional means of support to those who remain in England.

Labour, labour, labour, is the constant cry out here—is the only thing wanted, to make this one of the most blessed countries which a kind Providence has created for the use of mankind. One thinks of it by day—aye, one dreams of it by night.

The next great event is the arrival of the first mail steamer, the *Australian*, on the 29th Aug. As far as the actual steaming and sailing went, her voyage was not a bad one; but owing to the want of a proper supply of coals at the different coaling stations, her detention and deviation from the proper course (by calling at St. Helena) made her about 14 days behind her proper time. This will, no doubt, soon be rectified, and the arrival of the different mails better timed. Whilst the passengers speak in the highest terms of praise of the commander and officers, they were nevertheless exposed to discomforts, owing in a great measure to the hurried nature of her departure from England; and the crew were in a state of mutiny on their arrival here, and how they afterwards got on I know not. She is expected back here on the 25th inst., and I shall in future limit my communications to writing by the steamers. The *Australian* will take a very large amount of gold to England from the different places she calls at.

The Peninsular and Oriental Steam Navigation Company showed great wisdom in sending the *Chusan* out some months before the regular contract service, via Singapore, commences; they have thus time to make all their arrangements at the different ports, and there can be no doubt that the contract will be carried out by this princely company with the utmost regularity and dispatch. A magnificent ball was given to the officers of the ship at Sydney, and if time allowed, the same compliment, on a more humble scale, would, no doubt, have been paid them here. The *Chusan* arrived here from Sydney and Melbourne on the 11th inst., in the evening. She came right into the port, and anchored at the north arm, thus at once and for ever proving the capability of our port to receive these magnificent ships in her

on it which they so well deserve; but on the other hand, the directors of the Peninsular and Oriental Company could not foresee the large amount of gold that would offer. This will be a very profitable voyage for the *Chusan*, as she is understood to have made 2200*l.* for passage money alone from Sydney to Melbourne, and also 2200*l.* from Melbourne to Adelaide, every berth fore and aft being engaged at full prices—6*l.* 6*s.* and 10*l.* 10*s.*

The following are the several quantities of gold deposited in our Assay Office since my last:

Amount deposited up to 13th August	£903,838
Deposited 13th August, 5257 ounces	18,665
" 17th " 9488 "	33,682
" 20th " 5141 "	18,250
" 24th " 3545 "	12,586
" 27th " 5468 "	19,413
" 1st Sept. 1305 "	4,607
" 3d " 2874 "	10,205
" 7th " 1747 "	6,202
" 10th " 2843 "	10,094
Total number of depositors, 4147.	£1,037,542

We have heard of the South Australian gold escort having left Mount Alexander on the 21st August, for Adelaide, with 45,000 ozs. of gold, so that they may be expected to arrive here during this week; ships are also arriving almost daily from Melbourne, bringing back many people and much gold; so that altogether we may be said to be making rapid strides into the second million, which there is ground for believing will have arrived here before the year is out.

Our Assay Office is now in a most efficient working order. Liberal salaries have secured a sufficient number of the most talented men that could be obtained; and a very little addition to the present working staff will be sufficient to enable Mr. Babbage to issue gold tokens for circulation. The total cost of this establishment from 10th February to 24th August amounts to 4219*l.* the receipts (being a charge of 1 per cent. on amount deposited) 9767*l.*, leaving thus a large surplus for further improvements and additions in that department, if they should be found necessary.

The Burra Burra Company have declared their seventeenth dividend on the 1st of September, of 5*l.* per share; this bears out what I told you a short time ago, that the dividends would certainly not exceed 5*l.* per share per quarter. The monster engine will be set going on the 16th inst. I believe I have already informed you that the lode in the 50 fm. level had been cut in undiminished size and richness. By the *Australian* I shall probably be able to inform you what number of men are likely to remain at the Burra Burra during the spring and next summer.

The council, last week, passed an address to the Governor, requesting that he will obtain the services of either Mr. Hargraves or the Rev. Mr. Clarke, the eminent geologist, from Sydney, in order to authentic the extent and prospects of our gold-bearing country. An authentic account, made up in Melbourne, of the amount of gold raised from October last year to the date of the sailing of the *Chusan*, in the province of Victoria, gives a grand total of 2,532,422 ozs., or 105 tons 10 cwt. 35 lbs. 2 ozs., valued at 8,863,477*l.*

A great many outrages are being committed in Melbourne and at the diggings; at the latter place a regular stand-up fight has taken place, between a mob of 150 Irishmen and an equal number of English; one man was shot dead on the spot, and many were very severely wounded. The arrival of an American ship from New York, with Yankee emigrants, the first ship of several coming, is a new feature also. Land was selling in the business street of Melbourne (Elizabeth-street, a corner) at 27*l.* per foot; this appears almost incredible, but I have it from very good authority.

The Patent Copper Company, at Koorunga, are temporarily at a stand still; they are acting wisely, in my opinion, to give their men an opportunity of visiting Mount Alexander; were they prevented from going, they would only be discontented, troublesome, and consequently useless; in a short time they will be glad enough to return to their regular work, comfortable homes, and good wages. At Kapunda the water is kept well in fork by the two pumping machines; and 500 men could be well employed, were they to be had; but there is nothing for it but patience. Twelve months, I believe, will see a great change with regard to the supply of labour. Mr. Philcox and Mr. George Morphett, two of the gentlemen who got up the new South Australian Mining Company (Strathalbyn Mine) in England, of which I wrote in one of my last letters, arrived in the *Australian*.

THE GOLD FIELDS OF VICTORIA.

The total amount of the precious metal brought into Melbourne by the several escorts, and by private hand, up to the end of August, we showed to be 1,771,974 ozs. Since then the quantities brought in have been as under:

GOVERNMENT ESCORT.		
Sept. 3—From Ballarat	Ounces	4,627
" 7—Mount Alexander		37,956
" 10—Ballarat		4,897
" 17—Ballarat		4,661
" —Mount Alexander		47,061
" 25—Mount Alexander		29,628
" —Ballarat, unknown		=128,839
PRIVATE ESCORT.		
Sept. 3—From Mount Alexander		33,805
" 5—ditto		31,753
" 14—ditto		47,059
" 20—ditto		40,922
" 26—ditto		44,427=197,959
TOTALS.		
By Government escort		128,830
By private escort		197,959
Conveyed to Adelaide by South Australian escort on the 16th inst.		39,404
Total quantity brought down by escorts	Ounces	366,193

We have here tolerably correct data to determine the average weekly yield of the Victoria diggings. In an address to her Majesty, drawn up by the Legislative Council some days ago, it is stated that "the present weekly yield of gold, taking the last three months as a criterion, may be estimated at 80,000 ounces, which, at 70*s.* an ounce, gives a gross annual sum of 14,500,000*l.* sterling." This estimate is fully substantiated by the figures given in our previous article, and more than confirmed by the statistics given above. For we find that in the first four weeks of the present month close upon 370,000 ounces have been conveyed from the diggings by escort, in addition to the unknown quantities brought away by private persons, and still remaining in the hands of the diggers. Perhaps an average yield of 120,000 ozs. weekly would not be an exaggerated estimate. At all events, it is perfectly certain that the weekly yield is constantly increasing; but, on the other hand, it must be stated that the present is the most favourable period of the year for gold digging, and that the number of diggers is constantly increasing.

In our previous summary we estimated the total yield of our gold-fields, from their commencement to end of Aug., at 2,532,422 ozs., to which, adding the amount since brought in, we have a present total of 2,898,615 ozs., which, at 3*l.* 10*s.* per oz., is equal to 10,145,132*l.* sterling; but this amount, we may again state, we believe to be much below the actual value of the gold produced in Victoria to the present date.

We have said that the number of diggers is increasing. Our previous estimate gave the number at 70,000, and it is likely that upwards of 90,000 are at this moment on the ground. Taking the average weekly yield given by the Legislative Council, we find that the average yield per man a week is exactly 1 oz. This result is at least confirmed by the general statements of the diggers themselves, it being universally admitted that any persevering digger can easily secure 1 oz. per week—a striking contrast with the wages of the Lanark handloom weaver, and the pittance doled out grudgingly to the Dorsetshire labourer, or the famished Irish peasant.

That the quantity of gold produced rises or falls in proportion to the number of diggers is now a demonstrated fact; and two important inferences are deducible from it. First, that the capabilities of our gold-fields are almost without limit, since the more they are worked the richer they appear; and, second, that they offer remunerative employment to any number of men who choose to labour in them with energy and perseverance. These are the plain and practical facts on which English workmen can found a safe judgement as to the wisdom of trying their fortune at the diggings. We lay no stress on the chances of the exciting game of gold-seeking—we say nothing of the marvellous prizes won by some favorites of fortune, because that would be to run the risk of misleading and deluding the honest worker. If the certain gain offered by the diggings is not sufficient to induce a man to give them a trial, he is very foolish if he allows himself to be lured to them by the comparatively few chance instances of extraordinary success.

But it is not only fair to state that there are such instances, and many have come to light within the last few weeks. The most remarkable is the finding of a splendid mass of pure solid gold, weighing 28 lbs. 4 ozs. This superb mass has been purchased by the Executive for 165*l.*, for presentation to her Majesty, and is forwarded by the *Australian* steamer. These are solitary instances, however, and offer no standard of general success.

The experience of the past month has not alone tended to confirm the fact, that our gold-fields are not yet beginning to exhibit the slightest symptoms of exhaustion, but have given fresh evidence of their indefinite extent. In two instances it has been found that spots which had been tried and abandoned as comparatively unproductive have proved, upon more minute investigation, to be richly remunerative. Other localities, hitherto untried, are spoken of confidently as abounding in gold. It is not necessary, however, to supplement the substantial proofs of the enormous richness of the province by mere reports of additional gold-fields.

But, by the way of showing the extent and present aspect of the various gold-fields, we may quote the latest reports from several different localities distant very many miles from each other. An experienced man, writing from Mount Alexander on the 17th inst., says:—" Some of the gold finds around this creek have been numerous and heavy. On Tuesday last one man picked out a noble solid piece, about 9 lbs. of pure gold, besides a great quantity of smaller nuggets around it, all worth 80*l.* or 100*l.* at one swoop. Another party, on coming down to the pipe-clay, found between 9 and 10 lbs. of gold resting on the rock at an angle of about 45°, and lying beautifully in a sort of vein on the pipe-clay. * * * Many men with their families have evidently come up here now to settle permanently, for to exhaust the gold at the Mount will take many years yet—1880 won't see it out."

Another, dating his letter from Eureka, near the first Ballarat gold-field, writes—

" During last week a party at Little Bendigo obtained in a day 208 ozs., which every day since has increased as the party get further into the dip of the rock. This party certainly deserved success, for they sank the hole where no other party was sinking, and, having been some months unfortunate, were determined, in the event of that hole proving a failure, to bid farewell to the diggings. A great many instances of equally good luck are daily coming to my knowledge. Everything is now wearing a brighter aspect. It may be safely asserted that Eureka, if not now, will soon become the 'El Dorado' of Victoria."

A gentleman at Dasy-hill, at the Pyrenees, 30 or 40 miles further west, says:—" On the 10th Sept., since my last communication, the Dasy-hill diggings have advanced in public favour, and on good grounds, as, with an increased number of diggers, the average finds have, I believe, been larger than previously was the case. The diggers have almost entirely confined their operations to surface washing, having been prevented from sinking by the wet; the surface soil is universally auriferous, and in spots extremely rich, a party having in one afternoon procured 42 ozs. of gold; this, of course, is an instance of unusual good fortune, but I believe that I am correct in stating the average return from the surface-washing at 1 oz. per day per man. A nugget weighing 13 ozs. was picked up on the surface on Saturday last."

And a letter dated Reid's Creek, at the Owen's River, quite in another direction, being 150 miles north-east of Melbourne, contains the following passage:—" A person on the ground reports that a party of four got 17*l.* ozs. of gold in one day, and that he and his companions were making an average of 8 ozs. daily between them. The worst success ascertained was 2 ozs. and upwards per man per day. This person observes that he never saw at either the Mount Alexander or the Turon diggings the gold run so regular, and that where the diggers are now at work there is room for 4000 or 5000 people. The nuggets they have picked up weigh, in many instances, from 1*l.* to 1*l.* 10*s.* There are now about 100 people on the ground. The distance of these diggings from Melbourne is 180 miles on the Sydney road, and 15 miles from the township of Wangaratta."

The most cautious reader will now be able to judge for himself, from the evidence we have laid before him, as to the actual value of the gold fields now being worked, and their possible capabilities; but we think that it is no unwarrantable assumption to claim for the colony of Victoria the honour of being the richest gold field in the world.—From the *Melbourne Argus* of Sept. 24.

Original Correspondence.

NORTHAMPTONSHIRE IRON ORE.

SIR.—Your correspondent, "W. W." (of Winchester), informs us that "an assayist" has been residing for many months near and in Northampton, to form a correct opinion of the new ironstone, and that he has actually accomplished it. It is a surprising feat, considering the shortness of the time which has crowned his efforts with success. I beg "W. W." will present my compliments to the "first-rate assayist" and tell him he is a blockhead, or a very deep philosopher, or something else. It is no ordinary capacity that has discovered the identity of quartz and carbonate of lime of the primitive iron-sand of Malibar, and the alluvial ironstone of our oolitic group. I fear the jobbers are preparing to stick some one in the mud of the Nen. If iron is to be made in Northamptonshire, let it by all means be done on its own merits, without the false pretences of a first-rate steel company, "declared by the assayist." It is difficult to imagine who can expect to deceive, were it not too notorious that the more ignorant the scheme the more easy the capitalist. The letter is a libel, indeed, upon "Cornish gentlemen."—DAVID MUSHET : Dec. 27.

THE COPPER TRADE.

SIR.—Let us consider the case of the copper miners, taking the evidence (clearly a very partial one to the smelters) of Mr. Hill. Is it not monstrous that such immense sums of money should be annually expended in mining pursuits, with the certainty that the greater part must be fruitlessly spent, and unless something in the shape of *fusus natura*—some huge deposit of ore at a comparatively shallow depth—be discovered, all our endeavours are as nought! and yet is it to be wondered at, when it is admitted that the price of copper has no reference to the cost of its production, and is not regulated by the comparative amount of labour and capital required to produce it? I am not aware of any other article of commerce under the sun of which this can be said, nor of any other trade, except that in copper, in which the rates of profit are not regulated, and which do not vary with the value of money. Here, however, the value of money falls in Lombard-street, the price of copper rises in Thames-street, and the standard of copper ores falls in Cornwall, and simultaneously so. Can there be a greater anomaly than that the prices of all commodities should be influenced by the value of money except copper? I allude to its permanent fixed value. Apart from the natural fluctuations occasioned by supply and demand, which can or should have only a temporary effect, I calculate the natural price of copper at 10*l.* d. per lb., or 9*l.* per ton, *including* a fair profit to the smelter for the use of his capital; but they have been giving us 9*l.* per lb., or 8*l.* per ton, *exclusive* of an unusual rate of charge for profit on capital. The present price of copper is too high, and cannot be maintained, the causes of which I have already explained; but instead of recovering its true level it will, under the influence of the trade, unless combated by a movement among the miners themselves, recede to a monopoly price. Let the miners, then, associate and form a committee; let it be strictly a miners' committee, and I pledge myself to lay before them for their consideration, and, I trust, for their adoption, certain measures which shall improve their relative position, and by a simple operation have a wholesome check on the ore market, and exercise a fair legitimate control over the smelters.—A MINER: *Redruth*, Dec. 27.

P.S.—At the last meeting of the Geological Society at Penzance, a friend brought to my notice a petty grievance—and I call it so only as compared with others of greater magnitude—viz., the fees on sampling and weighing off ores paid to the copper company's agents; they are not only excessive, but are justifiable on no ground whatever, and should be swept away as alike unworthy of both smelters and miners. They are reluctantly paid by the miners, and should not be allowed to be received by the servants of any copper company possessing a proper feeling of independence.

THE KNOCKMAHON MINES, IRELAND.

SIR.—The paragraph in your Journal of the 25th Dec., relative to the falling off in the produce of copper ore from the Irish mines, and particularly Knockmahon, may in some degree tend to depreciate its real value. To those unacquainted with the position of these mines, it may be well to say that they stand upon the sea coast, and have no harbour for shipping; and the open bay, during the last three months, has been so boisterous, as to prevent our shipping the usual quantity of ore. However, I am glad to state that we have now on hand about 600 tons, which we shall be regularly shipping when the weather proves favourable. You will oblige by giving this information in your next Journal, in order to prevent any unfavourable impression.

Dec. 28. WILLIAM PAUL.

MINING NEAR TAVISTOCK.

SIR.—I observed in your Journal of Saturday last a paragraph, headed "Mining near Tavistock," wherein the writer states of having visited that district, the little mines, &c., and goes on to pass his opinion that, ere long, it will become a "splendid locality," and that Wheal Franco is included; but he also states that it is "wretchedly managed," which I am very sorry to hear, both for the sake of the lord and the adventurers. Therefore, knowing the party and Capt. Lane, the agent, his abilities and knowledge of the mine, I am very hard to believe that there has been any mismanagement to call forth such remarks, or odium, on his character as agent, or on the company, which are highly respectable—some of whom I know both at Tavistock and Plymouth; and was employed by them above 13 months since to inspect the said mine, and to see that the workings were carried out agreeably as before stipulated with the lord on additional ground being granted, and a reduction of dues being submitted to. I only agreed with the adventurers to inspect three times in one year; and during that time I considered it my duty to see that what was stipulated should be carried out, which was done and done when I left it in a very satisfactory manner; and it was then agreed that the 30 end should be driven through the cross-course; and it was then agreed that the 30 end should be driven through the cross-course at about the same angle as the lode ran, and then to drive south to cut it on the east side, presuming it was to have a considerable distance in that direction—the same lode having been drove south by a similar cross-course further west, between the two Wheal Francos, somewhere about 100 fms.

In the meantime, while this work was going onward, the engine-shaft was to be sunk to take the lode under the present workings at deeper levels; therefore, if this work has been done, there is no reason to complain. The writer states, also, that the mine is deluged through inattention, and the shaft full of lost lifts, and that even the top plunger will not act. All this may be the result of accident from the excessive late rains, or it may be partly a wilful act of some one by throwing a lump of iron, or something else, into the plunger column, which will be proved on the clacks being examined.

The shaft I do not think can be lost; that will probably be found again almost perfect. If the writer had extended his vision a little further south, and had probed there, amongst the little mines, I think he would have hit the mark, for there the shaft was really lost with the lifts in it; and I have the honour, if it be one of superintending its reconstruction, which I hope to accomplish in about six weeks; soon after which, with the present price of lead, I have reason to believe we shall open a good mine.

This goes to show that, if Capt. Lane had lost his shaft, he would not be the first. I can truly say, from the little I have seen of him, that I believe him to be a valuable, attentive, and useful agent, and not deserving what was said of him in the paragraph before alluded to.—J. PUCKEY : St. Blazey, near St. Austell, Dec. 27.

P.S. The writer of such calumny should state his name, then one would be able to judge whether he assisted in any way to let the water in, or prevent the clacks from working.—J. P.

WHEAL FRANCO.

SIR.—In your last week's Journal, a paragraph was inserted reflecting upon the management of the Wheal Franco. The statement I allude to, was that within the last few days, through insufficient attention, the mine was deluged with water, and the shaft lost full of lifts. Being an adventurer in Wheal Franco, I have made inquiries, and will give the answer in the words of the captain:—" It is true, in consequence of having such an influx of water, that our bottom lifts are working at present under water, but not that the water is gradually forcing. I can assure you that every attention has been paid both by myself, pitmen, and sumpmen. I am in the mine at night as well as day. When I found the water rising so fast upon us, at once began to send down another lift, the largest we had in the mine, which was an 8-in., in addition to the 12-in. then working. The engine was worked nine strokes per minute. This kept the water under for some time; but at length I found the water to be still increasing so much that those lifts were not sufficient to keep it under, and it rose over the plunger. After it was working for some time, it began to fail; I saw then that nothing was to be done but to get a larger lift. I at once made it known to the committee; they gave me orders to proceed with it without delay. Orders were given on the Friday to three foundries to cast a 14-inch lift and 15-in. pumps, and on the Wednesday week after we put it to work; so everything was done as speedily as possible. Every one connected with the mine felt a deep interest in the work, and did their utmost. The late rains have caused a great influx of water; and this is not the only mine which has felt the effects. Before the late rains, we were discharging to the adit 210 gallons per minute; we are now discharging 550. At present, the principal part of the water is coming from the eastward, and which is highly mineralised: the rods in the lifts are almost the colour of copper. I hope we shall soon get things in a regular course of working again. The 20 fathom level east is driving in a beautiful country." Now, Sir, you will perceive from this report that your informant was in error, when he said the shaft was lost full of lifts; and as many London adventurers will read your Journal, I have to beg the favour of your inserting this in your next week's impression.

Mining Correspondent.

BRITISH MINES.

20 shares, in which case the exact number of five has been allotted for the sake of convenience. Every remaining share has been allotted. It appears reasonable that where, as in this case, the directors are not seeking to obtain subscribers to the capital of the company, in which case the two companies, with the same object, would be rivals; but where the duties of the directors are merely those of management, that the fact of some of them being directors of two companies, so far from being objectionable, is advantageous. The information and experience acquired in the management of two companies should naturally be mutual benefit to both. All those directors of the Anglo-Californian Company who are directors of the Alliance, vacated office in Oct., and being then directors of the Alliance, were all re-elected by the shareholders. If any fault, therefore, is to be found with such appointment, it rests with the body of shareholders generally.—A HOLDER OF 1600 SHARES.

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R. SYMONS.

MODERN MINE BROKERS."

SIR.—A disreputable practice is growing up, but which it is to be hoped you will, in the exercise of your duty, nip in the bud—viz., that of advertising shares for sale at fixed prices, below or above the market, as may suit the purposes of the advertiser. A late instance is as follows:—Mr. John Robert Pike, in your last Journal, offers to the public upwards of 2300 shares in different mines, out of which, as is reported, a broker selected (finding them 5 to 10 per cent. *below* the market price), and made an immediate offer for two or three lots. The answer was, "they are withdrawn"—which rendered into plain English, means, "I, Mr. John Robert Pike, never had them." Could a system more detrimental to fair business dealings be devised than that of courting a position in the market, by pretending to have shares for sale which have no existence, except to be used as a decoy for the sale of other shares?" Mr. John Robert Pike" may be a well-meaning man, but he will excuse its being assumed that he mistakes his vocation. Mining has become too important an affair to be trifled with. It is rather an Argus than a Cyclop—there are brokers who are "wide awake," and can see quite as far into a millstone as John Robert Pike. Perhaps he will look into his rods and lines and other tackle before again emerging from his manufacturer of shares at the South Sea House.—A LOOKER-ON: Dec. 31.

LA PERUVIENNE GOLD WASHING COMPANY OF CARABAYA.

A company has been formed for working these mines, which are situated in Peru—a country too well known for its mineral wealth, more especially as regards its production of gold, to require any comment.

The capital of the proposed company is 150,000/-, in shares of £1. each—in every respect sufficient to carry out its operations upon an extensive and permanent scale. The tract of country acquired under this most desirable concession is very considerable, extending over 15 districts, on the course of the River Huarihuari, as also in other parts of the mountain range in the province of Carabaya—the concession of which is from the Government of the country, subject only to the payment of 3 per cent. on the exported returns. Other particulars are detailed in the prospectus.

It is a matter of historical record that at the time of the conquest of Peru, in 1535, the last of the Sovereign Incas offered to Pixar as a ransom for his life and liberty as much gold as would suffice to fill the vast saloon in which he was encaged, as high as he could reach. This ransom, which amounted to a considerable number of millions, was drawn from Cuzco, and collected principally from the neighbouring provinces of Carabaya, of which the mountains, the valleys, and the water-courses everywhere contain a large quantity of gold. It was from the same province that the precious metal was derived with which the interior walls and the dome of the Temple of the Sun at Cuzco had been decorated. The province of Carabaya, equal to an area of 50 leagues in length, by 40 leagues in breadth, is bounded on the south-east by the eastern Cordilleras of the Andes. The whole of the mountain range is filled with veins bearing native gold, part of which is already under exploration, under the direction of three Peruvian companies, denominated—Fras Andinas, Regenerada, Montebello, Mercedes, &c. From these mountains descend upwards of 20 small rivers or rivulets, the whole containing rich auriferous sands, and virgin gold in nuggets. These different water-courses and rivulets descending from the mountain, unite in the formation of the River Huarihuari, which, from the first period of its geological formation, up to the present time, have continued to receive into its bed the accumulating auriferous deposits, washed and torn from their mountain recesses by the freshets and torrents of ages. This River Huarihuari has a run of 50 leagues in length, and at many different parts its stream may be diverted from its course, and its bed explored to the period of the conquest of the New World, the province of Carabaya, together with the immense riches hidden in the bowels of the earth, passed into oblivion; and it is only of late years that the native population of Peru have become enlightened in respect to the immense riches of the country which they inhabit. The natural consequence has been, that several individuals of acknowledged ability, and of high standing and authority in the Legislative Assembly of the country, in connection with a general Governor of the province, have determined on the formation of a company for the exploration of the mines, and the branches or courses of the River Huarihuari, of which they have obtained legislative concession, in as far as regards the three most important districts, denominated the Moncave, the Apurima, or Carmen, and the Rio Pulipulli, the whole of the utmost importance, as abundant in veins and deposits of gold, independent of some 15 distinct windings of the River Huarihuari, which admit of it being turned from its original bed at particular seasons. Such are the peculiar advantages presented to the shareholders of the company La Peruvienne, which bids fair to rival the successful discoveries of Austria and California, and hereafter to prove the means of restoring prosperity and happiness to a country inhabited by a race of people, peaceful and hospitable by nature, and which has strong claims for wrongs suffered in former times by Christian Empire. We can only say that we shall feel particularly interested in the well doing and success of the present company.

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THE MINING JOURNAL.

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R. SYMONS.

MODERN MINE BROKERS."

SIR.—A disreputable practice is growing up, but which it is to be hoped you will, in the exercise of your duty, nip in the bud—viz., that of advertising shares for sale at fixed prices, below or above the market, as may suit the purposes of the advertiser. A late instance is as follows:—Mr. John Robert Pike, in your last Journal, offers to the public upwards of 2300 shares in different mines, out of which, as is reported, a broker selected (finding them 5 to 10 per cent. *below* the market price), and made an immediate offer for two or three lots. The answer was, "they are withdrawn"—which rendered into plain English, means, "I, Mr. John Robert Pike, never had them." Could a system more detrimental to fair business dealings be devised than that of courting a position in the market, by pretending to have shares for sale which have no existence, except to be used as a decoy for the sale of other shares?" Mr. John Robert Pike" may be a well-meaning man, but he will excuse its being assumed that he mistakes his vocation. Mining has become too important an affair to be trifled with. It is rather an Argus than a Cyclop—there are brokers who are "wide awake," and can see quite as far into a millstone as John Robert Pike. Perhaps he will look into his rods and lines and other tackle before again emerging from his manufacturer of shares at the South Sea House.—A LOOKER-ON: Dec. 31.

R. SYMONS.

LA PERUVIENNE GOLD WASHING COMPANY OF CARABAYA.

A company has been formed for working these mines, which are situated in Peru—a country too well known for its mineral wealth, more especially as regards its production of gold, to require any comment.

The capital of the proposed company is 150,000/-, in shares of £1. each—in every respect sufficient to carry out its operations upon an extensive and permanent scale. The tract of country acquired under this most desirable concession is very considerable, extending over 15 districts, on the course of the River Huarihuari, as also in other parts of the mountain range in the province of Carabaya—the concession of which is from the Government of the country, subject only to the payment of 3 per cent. on the exported returns. Other particulars are detailed in the prospectus.

It is a matter of historical record that at the time of the conquest of Peru, in 1535, the last of the Sovereign Incas offered to Pixar as a ransom for his life and liberty as much gold as would suffice to fill the vast saloon in which he was encaged, as high as he could reach. This ransom, which amounted to a considerable number of millions, was drawn from Cuzco, and collected principally from the neighbouring provinces of Carabaya, of which the mountains, the valleys, and the water-courses everywhere contain a large quantity of gold. It was from the same province that the precious metal was derived with which the interior walls and the dome of the Temple of the Sun at Cuzco had been decorated. The province of Carabaya, equal to an area of 50 leagues in length, by 40 leagues in breadth, is bounded on the south-east by the eastern Cordilleras of the Andes. The whole of the mountain range is filled with veins bearing native gold, part of which is already under exploration, under the direction of three Peruvian companies, denominated—Fras Andinas, Regenerada, Montebello, Mercedes, &c. From these mountains descend upwards of 20 small rivers or rivulets, the whole containing rich auriferous sands, and virgin gold in nuggets. These different water-courses and rivulets descending from the mountain, unite in the formation of the River Huarihuari, which, from the first period of its geological formation, up to the present time, have continued to receive into its bed the accumulating auriferous deposits, washed and torn from their mountain recesses by the freshets and torrents of ages. This River Huarihuari has a run of 50 leagues in length, and at many different parts its stream may be diverted from its course, and its bed explored to the period of the conquest of the New World, the province of Carabaya, together with the immense riches hidden in the bowels of the earth, passed into oblivion; and it is only of late years that the native population of Peru have become enlightened in respect to the immense riches of the country which they inhabit. The natural consequence has been, that several individuals of acknowledged ability, and of high standing and authority in the Legislative Assembly of the country, in connection with a general Governor of the province, have determined on the formation of a company for the exploration of the mines, and the branches or courses of the River Huarihuari, of which they have obtained legislative concession, in as far as regards the three most important districts, denominated the Moncave, the Apurima, or Carmen, and the Rio Pulipulli, the whole of the utmost importance, as abundant in veins and deposits of gold, independent of some 15 distinct windings of the River Huarihuari, which admit of it being turned from its original bed at particular seasons. Such are the peculiar advantages presented to the shareholders of the company La Peruvienne, which bids fair to rival the successful discoveries of Austria and California, and hereafter to prove the means of restoring prosperity and happiness to a country inhabited by a race of people, peaceful and hospitable by nature, and which has strong claims for wrongs suffered in former times by Christian Empire. We can only say that we shall feel particularly interested in the well doing and success of the present company.

WEST WHEAL LOVEL, in the parish of Wendron, Cornwall, held under lease for 20 years from the Duchy of Cornwall, dating from Nov. last. This valuable seat is situated in a highly favourable locality, being bounded on the east and north by the well-known Wheal Lovel, Wheal Union, and Trumpet Consols Mines, whose productiveness, and the large profits they have yielded to the adventurers, place them in a high and well-deserved repute in the district. It is an ascertained fact that seven lodges run through this seat, including those of the adjoining mines, besides others to the south, of known value. This seat is nearly a mile in length on the course of the lodges, and a mile and a half in width. It is bounded on the west by the Old Trevenen Mine, now about to be resumed under the superintendence of Capt. Michael Martin. In fact, it is the only piece of ground between the mines above named, and is quite surrounded by them. It is confidently asserted that this property, taking into consideration its situation, local advantages, &c., cannot be surpassed in the county. It can be well proved at a comparatively small outlay; and from the great experience and respectability of the present proprietors (Capt. P. Clyne of South Cadron, and others), there is no doubt of the operations being carried out in a legitimate manner.

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RAILWAY AND COMMERCIAL GAZETTE.

7

HENNOCK.—The shaft is still very spare for sinking, and without any alteration since my last. In the 50 south we are still driving by the side of the lode in a beautiful stratum of killas, the ground much improved since my last report; in the 50 north the lode is now about 2 ft. 6 in. wide, with more lead than I have seen anywhere to the north of the engine-shaft, with every chance of improvement; in fact, I consider it the most kindly looking lode I have ever seen in the mine. The slopes in the 40 south are up from 3 to 4 ft. for about 18 ft. in length, and the lode still continues to produce a fair quantity of lead. In the 50 south the lode is 3 ft. wide, with a leader of good work for 1 ft. wide, a very kindly lode. All our other operations are progressing very satisfactorily.

HINGSTON DOWN CONSOLS.—The general appearances of the mine are without important alteration since last reported on. We purpose sampling on Friday (the 31st Dec.) about 150 tons of ore.

HOLMBUSH.—I beg to inform you the ground in Hitchins's shaft, below the 145 fm. level, and the cross-cut south at the above shaft is much the same. The lode in the diagonal shaft, sinking below the 145 fm. level, is 10 in. wide, composed of spar, mundie, and stones of ore. The lode in the 145 east is small and poor, but not with out copper ore. In the 145 west we have not yet met with the great body of the cross-course; there ore, it must have underlined faster that it was found in the level above; however, we are pushing it on as fast as we possibly can. The lode in the 132 fm. level east, is in a disordered state, and the ground rather hard; but we hope soon to get through this piece of disordered ground. The lode in the 132 south is 5 ft. wide, producing occasional stones of lead. The lode in the rise over the 120 fathoms level, east of the great cross-course, is 4 ft. wide, all of which is saved for work, but it is low priced. We expect to make a communication to the winze sinking below the 110 this week; the country in the said winze is soft, and we shall take down the lode after we have holed. The lode in the 110 east is large, producing 6 tons of ore per fm.; but we fear it is low priced. The lode in the winze sinking below the 100 fathoms level is 4½ ft. wide, producing 4 tons of ore per fm. Since the eastern winze has been holed the mine is thoroughly ventilated, and we have resumed driving towards the 110 east. The ground in the 124 fm. level, north and south of Wall's engine-shaft, is favourable. The tribute pitches on the whole are improved.

KILBRICKEN.—Yesterday (Dec. 57) we set the engine-shaft to sink 3 fathoms, at 40 fm. per fm.; I set them 3 fms., as an inducement for perseverance to get the shaft down. I have set to stop the back of the 20 fm. level, at 61. 10s. per fm., and the lode is yielding 20t. worth of ore per fm.; set to stop north of the last mentioned at 61. 10s. per fm.; set the winze to sink in old bottoms, 1 fm., at 121. 5s. per fm.—lode much the same, yielding 60t. worth of ore per fm.; set the 20 fm. level to drive east; since driving here we find an improvement, as now yields good stones of lead ore. I have set all the kibble, filling, and landing for one month at 31. 10s., and the trammimg of the rubbish from the floors and yard at 2s.

KIRKCUDBRIGHTSHIRE.—The lode in the 98 end east is much the same. We have got through the bunch of ore in the 86 end east. The 74 end west has again improved, and is producing some good lead. The other bargains are as last reported.

LAMERTON UNITED.—Since last report the appearance of the lode in the adit level has greatly improved for the better; and, although we have been interrupted by its close proximity to the cross-course, its improvement is of the most satisfactory character, consisting of good capel stones, quartz, prian, and rich yellow copper ore; this lode alone, leaving out the Great Wheal Friendship lode, is likely to produce the most satisfactory result.

LEWIS.—The north lode in the 100 fm. level, west from the engine-shaft, is 3½ ft. wide, producing stones of copper ore, with very promising appearance. The same lode in the 90 fathom level, east from tin shaft, is 1 ft. wide, good work for tin; the south lode in this level, east from tin shaft, is 16 in. wide, opening tribute ground. The same lode in the 80, east and west from tin shaft, is 1 ft. wide, opening tribute ground; the north lode in this level, east from Praed's shaft, is 16 in. wide, opening good tribute ground. The north lode in the 70, east from Praed's shaft, is 18 in. wide, worth 12d. per fm. In the 60 fm. level, east from Praed's shaft, there is no alteration since last reported.

LYFORD CONSOLS.—The lode in the 50 fm. level, north of the engine-shaft, is large, full 2 ft. wide, and being composed of flockan, quartz, and occasional good stones of lead ore, is very kindly. In the cross-cut west in this level the ground is again hard. In the 36, north of engine-shaft, the lode is somewhat disordered.

MOLLAND.—The 32 west is still very large, carrying with it a kindly leader of ore on the south part, which has improved since last week, and is now worth 4t. per fm.; in the same level east the lode is 4 ft. wide, producing stones of ore and, from present appearance, we may be long expected at the lode; set to eight men, 1½ fm., at 61. 10s.; and in the western end, 1½ fm., at 5s. The 42 west is a little larger than it was last week, and the ground is more favourable for exploring set to two men, 1½ fm., at 31. 5s.; in the 42 east the lode has much the same appearance, as when last reported on, set to four men, 1 fm., at 3s.; the slopes in the back of this level are worth 7s. per fm., set to four men, 4 solid fms., at 31. 3s. The lode in the 39 west is still very large; this end I have not set, in consequence of having put the men to cut through the lode south, as we have not seen the south wall for some time past; the lode in the 39 east is 3 ft. wide, occasionally producing stones of ore, set to two men, 1 fm., at 51. 5s. The lode in the winze sinking under this level is 3 ft. wide, at present poor and unproductive, set to four men, 1 fm., at 9s. The lode in the adit at the eastern hill is 20 in. wide, occasionally carrying on the gossan fine spots of ore. The gossan I think to be auriferous, and any having the lode saved, set to two men, 2 fms., at 15s. per fm.

NANTEOS AND PENRHIIW.—The Etyntion deep level has been cleared and secured 66 fathoms east of the cross-cut, and the rails laid down to this point; here the level has come together, and requires whole sets of timber. The lode in Penrhiiw engine-shaft is without alteration, about 4 ft. wide, and yielding good stones of ore. The 36 fm. level, west of Penrhiiw shaft, is in a very strong lode, composed of spar and mundie, intermixed with clay-stone, but unproductive for lead ore; ditto driving east is in a lode 4 ft. wide, yielding 8 cwt.s. of lead ore per fm. The lode in the back and bottom of the 30, on the south lode, are without much alteration, yielding 8 cwt.s. of lead ore per fm. In the tribute pitch in the back of the 20, on the north lode, 60 fms. east of Taylor's shaft, the lode is about 4 ft. wide, yielding 12 cwt.s. of lead ore per fm. In the pitch in the back of ditto, 70 fms. east of ditto, the lode is 4 ft. wide, yielding 15 cwt.s. of lead per fm.

NEWLAND CONSOLS.—An important discovery took place a few days ago close to the south boundary hedge of this valuable sett by the owner of some four or five acres of land adjoining. A pit was sunk about 5 ft. deep, and laid open a lode from 4 feet to 5 feet wide, composed of flockan, gossan, and lead. Several cwt.s. of lead were thrown up from this pit, and the gossan was thickly impregnated with lead throughout; but in consequence of the lode running parallel with the boundary hedge, and dipping in this sett, the pursuit is abandoned and the pit filled in. An adit level is driving with all possible speed to intersect those lodes.

NORBURY.—We are driving the cross-course with all possible speed, which is without alteration since my last.

NORTH WHEAL ROBERT.—We have driven 7 ft. in the 42 fathom level, west of Murchison's shaft, since the setting-day; the lode at present is large, being about 8 ft. wide, composed of flockan, spar, peat, and mundie, with occasional spots of ore; I like the appearance of it, and I think ere long we shall cut the same shoot of ore that is gone down from the 30 fm. level; the change appeared similar to that of the 30 fm. level, before they cut the ore there. We have also driven about 8 feet in the 30 fm. level west of Murchison's shaft; the lode is about 4 ft. wide, composed of ore, flockan, capel, mundie, and spar, worth 3 tons of good quality ore per fm.; the ground in the cross-cut, in the 30 fm. level east, is very close and spar for breaking; also a similar appearance in the cross-cut in the adit, so that we cannot progress with halting this piece of ground as fast as we could wish. We have commenced the dressing department, and progressing fairly. The work appears to turn out ore equally as fast as expected, and I hope to have 40 tons ready for sampling by February. The general appearance of the mine at present warrants it being classed among the dividend-paying mines in a short period.

NORTH WHEAL TRELAWNY.—The lode in the adit level south is 3 feet wide, producing from 2 to 3 cwt.s. of lead per fm. The lode in the stope is also producing a fair quantity of lead.

OLD WHEAL BASSET.—The lode in the 20 fm. level, east of the last new shaft sunk, is 12 inches wide, and will turn out 10 cwt.s. of ore per fathom, opening good tribute ground. The lode in the adit west from Martin's shaft is 15 inches wide, and looking more promising.

PEMBROKE AND EAST CRINNIS.—At Garden's engine-shaft, at Pembroke, in the 48 fm. level east, the lode is 6 ft. wide, 18 in. on the north part is producing very good ore, and much improved the last 6 ft. in driving. In the 58 fm. level east the lode is 2½ ft. wide, with very good stones of ore. In the 58, east of Carlyon's shaft, the lode is 18 in. wide, also producing good stones of ore. At Hunter's shaft, in the 30 west, the lode is 2 ft. wide, composed of gossan with some malleable copper. At Reid's shaft, in the 80 west on Job's lode, the lode is 2½ ft. wide, producing about 1 ton of ore per fathom, worth 6s. per ton; this end is much improved. At Smith's shaft, in the 60 west, the lode is 2 ft. wide, with good stones of ore. In the 50 east the lode is 4 ft. wide. In the 70 east the lode is 18 in. wide. In the 90 east the lode is 3 ft. wide; 18 in. on the north part is producing good ore throughout. At Thomas's shaft, in the 30 west, the lode is 3 ft. wide, with ore, mundie, spar, prian, &c. In the 30 east, on Thomas's south lode, the lode is 1 ft. wide.

PENHALILE CONSOLS.—Engine-shaft: The shaft is now down 3 fms. below the 64 fm. level, and is still in course of sinking by eight men; the ground is moderate. The 64 fm. level north is suspended for a short time through deficiency of air. We are now rising in the back to communicate with the 56 fm. level; this rise is now producing 10 cwt.s. of ore per fm. In the 64 fm. level south the ground is good; the lode is small at present, producing 3 cwt.s. of ore per fathom; in the level here driving on the western part of the lode the ground is moderate; the lode is 6 in. wide, producing 4 cwt.s. of ore per fm. In the level driving below the 56 north the ground is fair; the lode is 1 ft. wide, producing 6 cwt.s. of ore per fm. In the 56 fm. level south we have come to whole ground; the lode is large, fully 2 ft. wide, of a very promising character; but at present poor for ore.—Gurney's Shaft: In the 48 fathom level south the ground is moderate; the lode is 7 ft. wide, producing a little ore.—Morcom's Shaft: We have not been able to do anything here for some time past, but are making preparations for letting down the water. The tribute pitches generally are producing a fair quantity of ore.

PENLLYNE COURT.—We are getting good saving work every day from the 15 fm. level east, while the branch of ore cut on the 21st Dec. in the level north continues most promising.

PERRAN UNITED.—The lode in the 10 fm. level is even better than when last reported; we have just attained the north wall, and in cross-cutting we have encountered several more very rich branches of grey ore. A considerable quantity of the 20 fm. level is now cleared, and I hope to be shortly in a position to commence a cross-cut to intersect the above lode in this level, where we have every reason to believe it will be found equally valuable. We have commenced to rise in the back of this level on two other lodes, from which we are raising some excellent stuff—the fact is, there is not another such mine as this in the county. It is generally believed that the ground now opened on the different lodes will yield, on being brought away, as much, or perhaps a larger portion of ore than was raised by the former parties, in which case we have an exceedingly rich mine, without even opening a foot of new ground. We are at present busy in preparing the dressing floors, and hope to have a good parcel of ore for sale in about six weeks. The building of the engine-house is progressing very favourably.

PERRAN WHEAL JANE.—We have two men driving in the adit on the cross-course, in order to ascertain the distance of the heave, and to see the effect produced on the lodes. Nine men are also actively employed sinking the engine-shaft; those

men are working stem time, in order to facilitate the work; the shaft is 10 ft. long by 6 ft. wide. Men are also engaged removing rubbish for the foundation of the engine-house and boiler-house, &c., and quarrymen are raising stones for the buildings. The founders are making the engine; the bob, and other parts, will be cast this week. The boiler is nearly finished; and all the other parts will be got ready in good time. The great copper lode is of great promise—having one of the finest backs for a copper lode in this county, and averaging in width from 18 to 20 ft.; and, from the nature of the stratum, the local position of the mine, and the number of large lodes passing through the sett, there is every chance of our having one of the best mines in Cornwall.

POLGEAR AND LANCARROW.—We have cut through the Blue lode in the 25 fm. level, which is 3 ft. wide, unproductive. The ground in the cross-cut continues hard.

RHAY HILL.—In presenting you with our monthly report of this mine, we beg to say that our prospects are not quite so good as on our last setting day, the tribute having to be advanced a little. In the tuckwork department we have suspended the driving on the new south lode east and west, it being at both points very poor and unpromising. We have put some men to drive west of the engine-shaft, on the south lode, which at this point is very strong and promising, producing some tin. We have four men employed rising from the 25 to the 17 fathom level, in order to prove the ground between these levels. We have two men employed in the 17 taking out the tributaries' work from under the run. We cannot say the quantity of tin raised in the last two months until the tributaries' work is got to surface.

ROUND HILL.—The lode in the deep adit level, driving east, is 3 ft. wide, decomposed eavan, and spotted with lead ore, ground favourable for driving. We have nine men clearing the cross-cut south, so as to get to the forebreast of the southernmost east and west lode with all possible dispatch. The deep adit level, driving south-west at the foot of the Round Hill, is in excellent ground for driving, our progress is about 12 fms. per month, which will enable us to prove along piece of ground in a short time.

SOUTH WHEAL RUSSELL.—We are continuing to drive the cross-cuts north and south from Rundell's shaft, and have met with some ore in the country in driving south. We continue to drive the adit level north on the cross-course, and during the last week intersected some beautiful branches of ore. From this circumstance we are strongly of opinion that we are not far from a good lode.

ST. AUVEST CONSOLS.—This morning (Dec. 23), at Hoppet's shaft, we hauled up a few kibbles of the lode that we took down in cutting a grass plat to commence our fire from, and the stuff from the lode is worth, at the least, 10 cwt.s. of tin to 100 sacks of the stuff of 12 gallons each.

Dec. 25.—At Hancock's the lode is a little harder, but as yet of precisely the same character as usual. At Hoppet's shaft commence proving the tin ground next week. In the present end the ground is clay-slate, and the lode is about 2 ft. wide, composed of tin, capel, and mundie, but not rich for tin. At Dowson's engine-shaft we have a little water, owing to the great excess of rains. I have moved the whim and the lode, and the tribute pitch is now drawing the lode. The lode in the shaft is hoisted, and the tribute pitches on the whole are improved.

TAVY CONSOLS.—The shaft is down 10 fms. from the 55, let 1 fm. to sink at 16. The 55 end is easier for driving, price 12s. 10s. per fm.; this end is the same as last reported, producing from 2 to 3 tons of ore per fm. The stope in the back of the 56 are just as last reported, turning out about 4 tons of ore per fm. In the 46 end there is a capital lode, worth from 4 to 5 tons of ore per fm. Also a good lode in the winze sinking below the 36, to meet the rise in the 46. The mine is looking very well, and the machinery in good order.

TAMAR SILVER-LEAD.—In the 215 end, or bottom level, there has not been anything done since last reported on. The pumping engine has undergone sundry repairs which has let in the water. In the 265 end the lode is 1 ft. wide, composed of mundie and spar, with a small quantity of ore. In the 190 end the lode is 6 in. wide, unproductive. In the 175 end the lode is 2 ft. wide, and producing work of a congenial appearance. In the 160 end the lode is 1 ft. wide, work of good quality. In the 145 end the lode is also about 1 ft. 6 in. wide, in which is rich work. At the north mine, the 100 cross-cut is driven west 9 fms. 5 ft. 6 in.—in this end we are daily expecting to cut the lode. In the 90 end driving north the lode is 18 in. wide, and yielding work of a promising appearance. In the 80 end the lode is 3 ft. wide, composed of capel and fluor-spur, with spots of ore. In the winze sinking in the bottom of the 70 fm. level, the lode is 2 ft. wide, and yielding work of a moderate quality.

TAVY CONSOLS.—The shaft is down 10 fms. from the 55, let 1 fm. to sink at 16. The 55 end is easier for driving, price 12s. 10s. per fm.; this end is the same as last reported, producing from 2 to 3 tons of ore per fm. The stope in the back of the 56 are just as last reported, turning out about 4 tons of ore per fm. In the 46 end there is a capital lode, worth from 4 to 5 tons of ore per fm. Also a good lode in the winze sinking below the 36, to meet the rise in the 46. The mine is looking very well, and the machinery in good order.

TINCROFT.—On Highburrow tin lode, the stope in the bottom of the 152, east of engine-shaft, are worth 14f. per fm.; in the rise in the back of this level the lode is 4 ft. wide, worth 12f. per fm. In the 142, driving east of Martin's east shaft, the lode is 3 ft. wide, worth 12f. per fm., for tin and copper; in Martin's east shaft, sinking below this level, the lode is 4 ft. wide, worth 10f. per fm. Chapple's lode, in the 142, west of engine-shaft, is 2 ft. wide, worth 5f. per fm., for tin and copper. In the 120, driving west of Downright shaft, the lode is 2 ft. wide, saving work. In the 110 west the lode is 2½ ft. wide, worth 12f. per fm. for tin and copper; in the winze sinking below this level the lode is 3 ft. wide, worth 10f. per fm. for copper. In the 100 west driving the 100 west the lode is 5 ft. wide, worth 14f. per fm. Dunkin's lode in the 110, driving west of engine-shaft, is 3 ft. wide, worth 10f. per fm. for tin and copper. In the 100 west, driving on the south part, the lode is 3 ft. wide, worth 8f. per fm. for tin and copper; the stope in the bottom of this level are worth 9f. per fm. The lode in the 90 west is 2 ft. wide, worth 6f. per fm. for copper. At North Tincroft, the lode in the 130, driving east of engine-shaft, is 3 ft. wide, worth 26f. per fm.; in the west end, same level, the lode is 2 ft. 6 in. wide, worth 13f. per fm. In the winze sinking below the 120 east the lode is 4 ft. wide, worth 30f. per fm.; in the west end, same level, the lode is 3 ft. 6 in. wide, worth 28f. per fm. In the 110 east, the lode is 2 ft. wide, but poor; in the west end, same level the lode is 4 ft. wide, worth 12f. per fm. In the 100 west, driving the 100 west the lode is 4 ft. wide, worth 28f. per fm. Our machinery in good order.

TRELAWSY.—At Trellwyn shaft, the lode in the 120 fm. level is 4 ft. wide, worth 6f. per fm. In the 167 fm. level, north end, the lode is 3 ft. wide, worth 5f. per fm.; in the same level south, the lode is 3 ft. wide, worth 8f. per fm. In the 92 fm. level, both north and south ends, the lode is 3 ft. wide, worth 13f. per fm. At the north mine, Smith's shaft is sunk 8 fms. 4 ft. below the 78 fm. level—ground stiff. In the 78 fm. level, north end, the lode is 3 ft. wide, worth 9f. per fm. In the 68 fm. level, north end, west part, the lode is 2 ft. wide, worth 6f. per fm.; the east part is 1 ft. wide, worth 9f. per fm. We have not yet cut anything in the 55 cross-cut going east. Our stope pitches and stonings are not quite so bright at present as they have been.

UNION (TIN).—We have opened out about 17 fms. on the course of the lode, carrying half the width of it, and find it producing just the same quantities of tin as when first intersected. We sold, on Friday last, 6s. 1½d. 3d. worth of tin, the produce of four weeks' stamping with three heads, showing the value of the lode equal to what has been reported.

WEST DING DONG.—Since my last report we have driven our adit end, north-east on the 20 fm. level, east of Richard's lode, 6 fms.; the lode is still improving in quality and in size—a lode 3 ft. wide, worth for tin from 18t. to 20t. per fathom. Our new flat-drot shaft is sunk under the bottom of the adit level 3 fms. The lode in this shaft is just as last reported—3 feet wide, worth for tin 20t. per fathom; but owing to an increase of water in the shaft from the lode, we are obliged to suspend the same for about seven or eight days' time, when we expect we shall have a new lift dropped to work in this shaft, which will enable us to go on more favourably. All the other parts of the mine are looking much the same as last reported. We intend putting with all possible speed to the east end, before they cut the ore there. We have also driven about 8 feet in the 30 fm. level west of Murchison's shaft; the lode is about 4 ft. wide, composed of ore, flockan, capel, mundie, and spar, worth 3 tons of good quality ore per fm.; the ground in the cross-cut, in the 30 fm. level east, is very close and spar for breaking; also a similar appearance in the cross-cut in the adit, so that we cannot progress with halting this piece of ground as fast as we could wish. We have commenced the dressing department, and progressing fairly. The work appears to turn out ore equally as fast as expected, and I hope to have 40 tons ready for sampling by February. The general appearance of the mine at present warrants it being classed among the dividend-paying mines in a short period.

WEST GOGINAN.—The lode in the engine-shaft, sinking under the 30 fm. level, is 6 ft. wide, but much the same in appearance as it has been for the last two months, spotted with lead ore, but not of any value at present.

AUSTRALIA.—The intelligence by the *Marco Polo*, to the 11th October, is 34 days later than that previously received. Along with her own letters she has brought the duplicates of those sent from Melbourne, 14 days earlier, by the mail steamer *Australasia*, which sailed on the 28th of September for London, via Adelaide, but has not yet arrived. The latter vessel has on board gold to the extent of 9170 ozs. shipped at Sydney, 145,774 shipped at Melbourne and Geelong, and 65,000 shipped at Adelaide, making a total of about 220,000 ozs., valued at \$80,000. Although she received so small an amount at Sydney, the *Phœnix*, which sailed the day after, took 48,939 ozs. All the accounts are exceedingly favourable; the Mount Alexander deposits were fully maintaining their character, the totals brought down by escort during the week preceding the departure of the *Marco Polo* having been 99,000 ounces (400,000), while it was at the same time reported that the quantity still to be forwarded was rapidly accumulating. The price of gold at Melbourne was 68s. Bank bills 10 per cent. discount, and private bills 8½ per cent. The banks had ceased to make advances, and were buying gold on their own account.

From Sydney the latest papers are to the 2d of October, to which date the total amount of gold shipped from Sydney was 2,474,627l. The escort from Bradwood had brought in 489 ozs.; from Azuram, 260; Bell Creek, 50; Goulbourne, 12; Sofola, 102; Bathurst, 47; and Nass, 45 ozs. A dispute with the Australian Agricultural Company's agent, with regard to digging on the company's land, had caused much unpleasantness on the Peel diggings. The Legislative Council had referred a bill to incorporate the Great Nugget Vein Company to a select committee. A report (it is said) has reached town, which appears to be pretty well authenticated, that a nugget of gold in quartz had been discovered at the Louis, weighing upwards of 40 lbs. It was found by an old man, who is endeavouring to keep the matter a quiet as possible, lest it might be claimed by the Great Nugget Company, as was the case with the last large specimen that came to town from that quarter. With regard to the British Australian Gold Company, the *Sydney Herald* contains advertisements showing a contest between Mr. Davis and Mr. Fawcett, as to the right of the latter to act as its representative. Each party denies the authority of the other, and warns the public to that effect. A nugget of 340 ozs., purchased by the Government of the Colony of Victoria as a present for the Queen, is stated to have been brought by the *Marco Polo*. This ship, which has just arrived, after having made the passage from Liverpool to Melbourne in 68 days, and home in 76 days, is a vessel of 1400 tons, and was built last year at St. John's, New Brunswick.

CALIFORNIA.—We have news from San Francisco to the 16th of Nov., at which date the *Governor* left, with \$2,328,212 in specie on freight; and the *Illinois*, with the Californian mails, \$2,539,046 in freight, and \$400,000 in the hands of passengers. Sacramento had been nearly destroyed by fire. San Francisco, Marysville, Sonora, and Calaveras, had also suffered severely from conflagration. The correspondent of the *Times* says:—"The news from the mines continues encouraging. In a recent journey through the southern mines, embracing the country between the Stanislaus, the Tuolumne, and the Merced rivers, and as far as Mariposa, I found the miners, on the whole, all doing well. At Mariposa operations were greatly limited for want of water; but on the Mercedes, for a space of 10 miles, the river swarmed with miners earnestly at work, and doing well on the 'bars,' which were producing great quantities of gold. It is astonishing how the country is becoming peopled. The most remote nooks and glens, and the deepest ravines, have their inhabitants, gathered from all nations, all living by the same means. The amount of labour of all sorts performed is prodigious. In some places the water is 'flumed,' for 10 to 15 miles at a stretch, to supply the dry diggings. The custom is now very common of raising the water by undershot wheels supplied with buckets set in the rivers. I counted over 50 of these contrivances. A new machine for washing gold was in operation in Texas-hill. The earth is conducted down to it, in place of the water being raised up from the river."

The directors of the Mariquita and New Granada Gold Mining Company have given notice that they are about to call a meeting for the purpose of declaring a dividend, and also to decide upon the issue of 50,000 shares held in reserve by the company. The Mariquita Company, although only established above eight months, is the first of all the gold mining companies to pay a dividend to the shareholders; and although that dividend will probably be only at the rate of 10 per cent. per annum upon the capital, it must be considered that the result is most favourable. The period during which the company has been in active operation has been, perhaps, as unfavourable as could well be selected, the scarcity of water having prevented the full force of the machinery from being applied to the ores raised; and, as during the next six months there will probably be a greater abundance of water, the results cannot be expected to be less favourable to the shareholders than during the past six months.

The London agents of the South Australian Copper Smelting Company have received the subjoined communication from the secretary of that undertaking, dated Adelaide, South Australia, Sept. 6. Owing to the attractions of the gold-fields in the neighbouring colony of Victoria, the large supplies of copper from this source are likely for a time to be reduced, if not almost suspended:—"We are suffering just now from the want of labour to a much greater extent than ever, and we look forward to the loss of our entire labouring population during the next six months of summer. With this prospect before us, we cannot expect to produce much, if any, copper ore during that period, and the supply of copper will be very limited, sufficient to justify you in demanding full rates for all we are able to ship you. We observe the efforts making in England to supply Australia with labour, and we sincerely hope that the interest excited in our behalf may continue undiminished until our wants are supplied. Our company alone could, at the present moment, find employment for from 500 to 1000 persons, consisting of miners, engineers, blacksmiths, carpenters, masons, carvers, labourers, and others, and all classes of colonists are, more or less, in want of labour."

The Australian Auriferous Ore and Reduction Mining Company have issued a notice to their shareholders that Mr. Webb, the local manager, has been obliged to wind up the company's affairs in Australia. The reason for this has not transpired, as Mr. Webb's letters, detailing the information, had been forwarded by the Australian Mail steamer, due the 30th Nov. It is supposed he will take the journey overland, and be here in the middle of the present month, when a general meeting of the shareholders will be summoned to hear his statements, and likewise determine future proceedings.

The Australian Consols Gold and Copper Mine shares were done after business hours at the value of ½ to 1 prem., and commanded great attention, in consequence of an arrangement entered into for leasing the minerals on the lands of the company, consisting of 26,000 acres, in the Hunter River district, a few miles distant from the auriferous estate of the Australian Agricultural Company. The conditions are, it is understood, 6d. per acre fee for a lease of 21 years, with 1-12th royalty, which will amount to a present bonus of 40s. per share on each share of the Australian Consols. The revenue of this company, it is also expected, will be very great, since, irrespective of that derivable from royalties, a large sum will come into the coffers of the company from the increased rents of their lands, and the enhanced value of the town allotments, by reason of the numerous population that will locate on its domains.

The Anglo-Californian Gold Mining Company have despatches from Sir Henry Huntley, their superintendent, stating that, owing to the rains, he anticipated being able in a few days to set the water-wheel to work, so as to be able to form a correct estimate of what work might be effected by their present machinery. At the same time he has forwarded a box of specimens of gold quartz, taken indiscriminately from the Diecksburg Mine. These we have inspected; they are more than of average quality. In the poorest stones gold is perceptible to the naked eye.

The Agua Fria Gold Mining Company have received advices from the manager, Mr. Hepburn, stating that an agreement with Messrs. Palmer, Cook, and Co. had been executed, under which that firm renounce all right to the undelivered shares, in number 16,667, in consideration of 10s. per share by instalments of 2s. per cent. on the net profits of the Agua Fria Mine. By this arrangement the agreement now under treaty with the Gold Hill Company will be unfogged by any division of profits to these shares. The private accounts received by the directors of the Agua Fria Mine itself are still stated to be very encouraging.

The Yuba River Company's letters from San Francisco, state the machine for washing the alluvial soil was at length complete, and had been put on board a vessel for Ouseley's Bar, on the 13th of November. The engineer-in-chief has it under his care. The mining agent writes from the East, dated the 13th of November, that he was anxiously awaiting its arrival. He says, "I am quite well, and in high spirits. There are millions of dollars worth on the Bar, only requiring the proper means of extracting them." Wright's machine, before referred to, is the most approved method, and would be in full operation by the 20th of last month. The advice by the next mail are, therefore, looked for with much interest.

The West Mariposa Gold Mining Company have received advices dated Nov. 15, together with notarial copies of the agreements for the purchase of the property, as already notified, and of which possession had been duly taken by the officers of the company. The geological and experimental report furnished by the mining captain is highly satisfactory—not only as to the character of the quartz rock generally, but it also testifies the existence of an extensive surface deposit of ferruginous earth abounding in gold. This coating of earth, which, upon testing, has been found to produce at the rate of \$700 per ton, can be treated independently of heavy machinery, and has already afforded to the staff of workmen a means of employment, from which the most satisfactory results may be anticipated.

We understand the application for shares in the Brucutu Gold Mining Company (advertised in our last) are numerous, and from parties of the highest standing in London and elsewhere—fully equal, indeed, to the whole number that are to be issued—which we are not surprised at when we look at the locality and the profitable results attending the workings at the St. John del Rey. In this, which may be called the golden days of mining adventure, the present speculation appears to offer considerable and unusual advantages, the capital required is but small, the distance not great, the district undisturbed by sickness and governed by well-regulated discipline, such as to ensure fair play and early intelligence of results, we are led to anticipate most favourable results therefrom.

For obvious reasons, we have abstained from noticing before this the return of Capt. John Hitchins again to this country, but the Australian Mining Company's meeting, held on Thursday, in which his name so prominently appears, no longer imposes any restraint on us. We can only say we are glad to congratulate him on his arrival, and the satisfactory manner in which his services (arduous as they must necessarily have been) were so fully appreciated and acknowledged by the unanimous vote of thanks of a large meeting of proprietors.

We understand that during the past week the whole of the shares in the Devon United Mines have been subscribed for by some highly influential parties in London. Very favourable reports have recently been received from Captain Carpenter, and his recommendations are now being steadily carried out. The whole of the machinery has been completed, at a cost of 4000l. All the requisite buildings have been erected, shaft sunk 40 fms., levels driven, and the mine placed in a most efficient position for thorough and profitable development.

We understand such is the demand for shares in the Crow Hill Mine (a new Irish adventure), that a 50 ft. part has realised 350l. A steam-pumping-engine is in course of erection. A large quantity of lead ore is already broken, and will be speedily brought to market. The shares are to be subdivided.

The Bottle Hill Mine is now in a most flourishing state: there are stopes taken away at seven different places, and all turning out well; one of them is a fine lode, 5 ft. wide, tinnily throughout. There are just taken from the bottom of Josiah's shaft some stones of tin, of more than ordinary goodness.

At the Electric Telegraph Company of Ireland meeting, on Monday, it was resolved that the directors should have power to revise the agreement with the contractor, and also apply for an Act of Parliament to incorporate the company, limiting the liability of the shareholders, and such other objects as might be deemed expedient. The bill was lodged on the 29th, so as to comply with standing orders.

BIRMINGHAM.—On the 18th December, John R. Reed, Esq., for many years manager of the Berehaven Mines, County of Cork, Ireland.

RAILWAY CHARS.—The amount falling due in January is 1,024,260l.—which 79,000l. for foreign companies.

THE COPPER TRADE.

PRODUCE OF THE PRINCIPAL COPPER MINES OF CORNWALL AND DEVON FOR THE QUARTER ENDING DEC. 31, 1852:—

Mines.	Sales.	Tons.	Amount.
Devon Great Consols	3	5394	£32,486 0 6
United Mines	3	3618	20,808 9 6
Wheat Buller	3	2361	15,632 19 6
Wheat Bassett	3	1780	10,004 8 6
Corn Brass	3	1737	11,673 8 6
Tincroft	3	2360	10,117 17 6
Par Consols	6	1196	9,799 19 6
West Caradon	3	993	9,119 15 0
Fowey Consols	6	1123	7,997 19 6
South Caradon	3	713	6,473 18 6
Alfred Consols	3	836	6,621 3 0
Wheat Seton	3	1264	6,236 12 0
North Pool	3	1164	6,109 6 6
Halamanning and Croft Gothic	3	1101	5,942 5 6
Phenix Mines	2	560	5,485 2 0
Consolidated Mines	2	899	5,175 2 0
Wheat Friendship	3	513	5,113 6 0
South Frances	3	650	5,088 16 6
South Tolquis	3	600	5,073 14 0
East Croft and Dudnance	2	722	4,487 18 0
West Treasury	2	619	3,815 4 6
North Bassett	3	661	3,963 7 6
Conduffor	2	549	3,861 3 6
North Roscar	2	538	3,853 3 6
Bedford United	3	489	3,518 14 6
Holmbush	2	600	2,952 13 0
Tresavean	2	913	2,731 17 6
Perran St. George	1	686	2,625 13 0
Marke Valley	2	646	2,593 19 6
Corn Brass	2	526	2,458 14 6
East Pool	2	629	2,512 1 0
Botallack	2	277	2,204 13 6
West Seton	2	282	1,943 4 6
Carbone Vean	2	431	1,889 9 6
West Bassett	2	282	1,662 0 6
St. Day United	1	260	1,551 5 6
Levant	1	303	1,438 17 0
Treviskey	1	254	1,433 13 6
Wheat Arthur	2	195	1,379 1 0
Trelleigh Consols	3	199	1,287 11 0
Wheat Speedwell	3	141	1,188 15 6
Hington Down	3	147	1,183 16 6
Wheat Trebarhan	2	195	1,136 8 6
West Wheat Alfred	2	223	1,119 15 0
Dolcoath	2	297	1,063 3 0
Wheat Comford	2	418	1,057 14 6
Gonamena	2	110	1,026 5 0
Wheat Clifford	1	197	956 12 0
Great Wheal Alfred	2	178	835 11 0
Tywarnhayle	2	300	798 4 0
West Fowey Consols	1	104	775 2 6
North Daniel	2	113	771 15 0
Priddy Wood	2	199	742 10 6
Tavy Consols	2	72	718 5 6
East Crowndale	2	169	718 3 6
West Damsel	2	161	692 6 0
Pembroke and East Crinnis	1	150	646 3 0
Wheat Tremayne	1	44	592 18 0
West Providence	1	67	571 3 0
Wheat Agar	2	83	459 2 6
Carvans	1	43	408 15 6
Wheat Franco	1	33	348 6 0
Crane and Pejaws	1	37	294 2 6
Boscastle Dell Downes	1	46	292 2 0
Wheat Brewer	1	53	291 12 6
Wheat Crebor	1	70	273 16 0
Wheat Guskus	1	52	260 0 0
Hawke's Point	1	91	634 10 6
Wheat Unity	1	67	556 9 6
North Down	1	37	524 12 6
Callington—Kelly Bray	1	42	235 0 0
Wheat Bury	1	82	228 7 0
West Town	1	48	208 16 0
Tretheven	1	21	204 1 6
Wheat Russell	1	79	203 1 6
North Wheal Unity	1	18	172 10 0
Wheat Ellen	1	10	172 2 0
Wheat Carpenter	1	28	169 2 0
East Seaton and Maude	1	34	168 6 0
Wheat Harriett	1	30	167 11 0
Trannack and Bosence	1	23	161 13 0
Wheat Cupid	1	21	158 0 6
North Wheal Buller	1	31	156 4 0
Rosewarne	1	35	153 2 6
East Wheal Rose	1	22	152 6 0
St. Aubyn and Grylls	1	30	144 0 0
Calstock United	1	35	145 9 0
East Gunnislake Junction	1	33	141 18 0
Cook's Kitchen	1	29	140 10 0
Clyde and Wentworth	2	41	115 3 6
West Trethellan	1	70	140 0 0
Waters' Ore	1	46	130 5 0
Wheat Bedford	1	36	130 5 0
Wellington Mines	1	18	126 10 6
Wheat Mandu	1	22	121 11 6
Wheat Prosper	1	59	120 14 0
Hawkmoor	1	22	116 5 0
Wheat Lemon	1	24	112 4 0
West Russell	1	22	

At Perran Wheal Jane meeting, on the 29th Dec., the accounts showed—Balance at bankers, £142. 17s. 9d.—Labour cost, Sept. and Oct., £22. 7s. 7d.; office expenses, 5d. 18s. 4d.; stationery, &c., 12s. 6d.; leaving a balance at banker's of £21. 10s. 4d. The balance of assets over liabilities (including Nov. and Dec. costs) is £121. 10s. 4d. A contract was settled with Messrs. Sandys, Vivian, and Co., for a steam-engine of 30-in. cylinder, cast-iron steam case, 9-ft. stroke in cylinder and shaft, complete, including a boiler 9 tons, £6. 72s.; and it was resolved that, on account of the expense, the report of the proceedings and accounts should not be printed.

At Callington Mines bi-monthly meeting, held yesterday (Peter Stainsby, Esq., in the chair), the accounts showed—Balance last account, £538. 2s.; mine cost for Sept., 932. 18s. 6d.; ditto Oct., 775. 14s. 6d.; interest and discount, 34s. 13s. 7d. = £180. 13s. 9d.—Copper ore sold, 359. 0s. 6d.; silver-lead ore, 423. 12s. 7d.; amount realised by sale of engine and old materials, 1353. 18s. 11d.; call, 2500. leaving balance to next account, 1156. 1s. 7d. A call of 10s. per share was made, and a special meeting convened for the 19th of Jan., for the purpose of absolutely forfeiting those shares upon which the preceding calls shall not have been paid.

At East Gunnis Lake Mine bi-monthly meeting, on the 28th Dec., the accounts showed—Balance from last account, 158. 2s.; mine cost for Sept., 932. 18s. 6d.; ditto Oct., 775. 14s. 6d.; interest and discount, 34s. 13s. 7d. = £180. 13s. 9d.—Copper ore sold, 359. 0s. 6d.; silver-lead ore, 423. 12s. 7d.; amount realised by sale of engine and old materials, 1353. 18s. 11d.; call, 2500. leaving balance to next account, 1156. 1s. 7d. A call of 10s. per share was made, and a special meeting convened for the 19th of Jan., for the purpose of absolutely forfeiting those shares upon which the preceding calls shall not have been paid.

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At Mengearne and Tregunstine Mine meeting, on the 21st December, the accounts showed—Labour cost from 1st May to end Nov., 314. 13s. 5d.; merchants' bills, 462. 12s. 1d. = 3617. 5s. 4d.—Balance last account, 406. 9s. 1d.; call in 12s. 1d.; leaves balance to next account, 1677. 16s. 6d.; estimate of copper ores for sale, 1417. = 333. 16s. 5d.; against 369. 0s. 6d., estimated liabilities, including Nov. and Dec. cost. The engine-shaft is sinking below the 36 fm. level on the north lode, which is from 2 to 3 ft. wide, with a very slight underlie, producing good saving work, altogether a very promising and kindly lode. The 36 west is worth 1½ ton of good ore per fm. The tribute department is without change. The pitches are all in old backs, and at 13s. 4d. tribute.

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At Wheal Charlotte quarterly meeting, on the 1st Dec., the accounts showed—Tin sold in Nov., 324. 17s. 9d.; ditto Dec., 250. 17s. 7d.; call Sept., 1250. leaving for carriage of tin, 45. 12s. 6d. = 1890. 7s. 5d.—Balanced last account, 1199. 18s. 3d.; dues (1-20th), 287. 19s. 1d.; costs, Aug., Sept., an Oct., 390. 4s. 7d.; merchants' bills, 632. 16s. 4d.; leaving balance to next account, 1677. 11s. 4d.

At Nant-y-Cain Mine bi-monthly meeting, on the 15th Dec., the accounts showed—Labour cost underground in Oct., 105. 16s. 4d.; Nov. 7s. 1d.; 10s. salaries, &c., 467. 18s. 3d.; merchants' bills, 392. 3s. 4d.; new crushing mill and erection, 112. 14s.; printing and purser's salary, 10. 18s. 6d. = 1142. 11s. 6d.—Leaving arrears still due of 24t. A call of 2s. 6d. per share was made. There is no alteration in the north adit. The stope continues to yield as usual. The winze in the 43 north has a leader of good copper ore—a promising pitch. The engine-shaft is down, the lifts fixed, and working well. The rise in the 43 south produces good stones of ore.

At Devon Consols North meeting, on the 21st December, the accounts showed—Balance from last account, 511. 6s. 2d.—Cost for Aug., 130. 7s. 6d.; Sept., 136. 1s. 2d.; Oct., 93. 16s. 6d.; Nov., 78. 17s. 1d.; secretary's salary and office rent, 12s. 12s.; travelling, printing, and purser's salary, 10. 18s. 6d.; leaving arrears still due of 24t. A call of 2s. 6d. per share was made. Since the last meeting, the engine-shaft has been sunk 19 fms. through a favourable killas, and is continuing down to meet the lode, which will pass through the shaft in 10 or 12 fms. further sinking. The steam-engine and machinery are working in the most satisfactory manner. The contiguity of the mine to the Devon Great Consols leads to the expectation of shortly meeting with some rich courses of ore.

At Treburchet United Mine adjourned meeting, on the 16th Dec., the accounts showed—Balance from last account, 895. 2s. 1d.—Sept. cost, 147. 9s. 1d.; Oct., 142. 8s. 8d.; leaving balance to next account, 605. 4s. 4d.—being cash in hand, 400. 11s. 4d.; arrears due upon call, 204. 10s. Capt. T. Julian, in his report, states that in coexisting he found a lode which, from its bearings, he has reason to hope is the old Treburchet lode; he then drove a cross-cut south 10 feet, at 20 fms. depth, and there found the lode from 3 to 4 feet wide, 20 inches of which is a fine gossan, and the remainder capel, bearing every indication of proving productive at a deeper level: he claims it as a new and good discovery. At the new shaft they have gone through a splendid lode, 7 feet wide, westward 12 feet, and he recommends flat-rode being applied at once. The boiler at the foundry is nearly finished, the engine progressing, and the house quite ready to receive it; meanwhile, the water-wheel is doing good duty. The caunter lode in the 15 has been driven on 2½ fms.—lode about 2½ feet wide, composed of spar, mudi, and flockan, with spots of lead here and there, and likely to yield at deeper levels.

At Cwmdylo Rock and Green Lake Copper Mine bi-monthly meeting, on Thursday (John Webster, Esq., in the chair), the accounts showed—Balance last account, 17. 11s. 4d.; received for deposit and arrear on shares, 184. 18s. last; premium on 112 of the shares, 22s.; temporary loan, 180. leaving from manager and purser on account of shares, 50.; for their salary, charged to end of Nov., but not paid them, and abandoned, 153. 8s. = 796. 6s. 10d.—To 37 shares not delivered, and still standing as stock of the company, 37. 5s.; paid Oct. cost, 267. 11s. 7d.; Nov., 431. 7s. 2d.; leaving balance in hand to next account, 97. 16s. 6d. The liabilities to the end of Jan. are estimated at 1490t., which included the current cost to that period, the repayment of the temporary loan, and the year's interest due to the preference shares: 25 tons of ore had been transmitted to the smelting-houses for sale, and the result would prove satisfactory. The chairman had paid a visit to the property, where everything was progressing satisfactorily, though he was sorry to observe that the recent hurricane had occasioned serious damage, which would entail some expense, and delay the operations for forwarding the ore to market for a short period. A call of 10s. per share on the deposit shares was made. The committee were unanimously re-elected, with the addition of Messrs. Archibald and Humphries for the ensuing two months. Thanks were voted to the chairman, and the shares remaining undisposed of will be distributed pro rata among the shareholders at par.

At West Wheal Townan meeting, on Wednesday, the accounts showed—Balance from the end of Aug., 49. 12s.; mine cost in Sept. and Oct., 1457. 11s. 6d. = 1198. 3s. 6d.—By mining cost (less dues), 28. 19s. 1d.; tin ore sold, Oct. 6th and Nov. 10th, 1000. 0s. 6d.; copper ore sold, Oct. 11th (less dues), 108. 5s. 3d.; lead ore sold, Nov. 18th, 29. 4s. 6d.; leaving balance against mine of 322. 13s. 9d. The agent reported that the lode in the 40 cross-cut was 3 ft. wide—capel and spots of ore, the lead lode not so productive. Taylor's lode, in the 25 fm. level west, is 5 ft. wide—capel and a little ore. The tin lode in the 25 is opening good tribute ground. In the 15, fine stones of ore. The tribute pitches are looking well.

At Wheal Robins bi-monthly meeting, on the 28th Dec., the accounts showed—Balance last account, 239. 16s. 5d.; calls received, 218. 16s.; received for tin sold, 53. 9s. = 314. 1s. 5d.—Labour cost for October, 179. 17s. 9d.; November, 139. 10s. 6d.; balance of May bill, 47. 11s. 2d.; royalty, &c., 9. 18s. 11d.; leaving balance to next account, 135. 11s. 1d.; with arrears of calls still due, 90. 12s. 4d. The liabilities were due to merchants from June to the end of Nov., 363. 7s. 4d.

At Balnoon Consols Mine meeting, on the 10th December, the accounts showed—Black tin sold, 663. 12s. 1d.; call in August, 235. 12s. 1d.—Labour cost from July to end of Oct., 339. 6s. 4d.; merchants' bills, 157. 2s. 5d.; surgeon, 3s. 16s.; balance from last account, 47. 1s. 6d.; leaving balance to next account, 131. 1s. 3d. The lode at south flat-rod shaft is worth 10t. per fathom, but suspended at present in consequence of the increase of water; the winze west is worth 15t. per fathom; south, from whence they have opened the lode for 10 feet without reaching the wall, they have risen 550f. worth of tin. The male lode of Reeth Consols is rich within 60 fms. of the boundary, and has not been wrought in Balnoon, where they have an extensive piece of virgin ground through which it must pass. Costen pits will be put down to trace it as soon as the weather moderates.

At the Orsedd Mine meeting, on Thursday (J. Y. Watson, Esq., in the chair), the accounts showed—Calls, 195. 7s. 11d.—Balance last account, 72. 15s. 7d.; labour cost for Oct., 57. 2s. 3d.; ditto Nov., 34. 4s. 10d.; leaving balance in hand, 31. 9s. 10d. There was a balance of assets over liabilities of 132. 11d. Captain Michell stated that nothing had been done since last meeting beyond driving the 10 upon the east and west lode, the last 4 or 5 fathoms of which would produce about 4 or 5 cwt. of ore per fm. Up to the present time he had not been able to procure a second-hand steam-engine.

At Prince Albert Consols meeting, on Wednesday, the accounts showed—Balance in hand, 197. 7s. 11d.; calls, 837. = 1034. 7s. 11d.—By Sandys, Vivian, and Co., on account of steam-engine, 600t.; labour cost, Sept. and Oct., 415. 10s. 3d.; office expenses, two months, 16. 18s. 10d.; Princess Royal, rent for one year, 10s.; inspection, 6. 12s. 6d.; leaving balance in hand, 184. 17s. 4d.—The statement of assets shows: Balance at bankers, 184. 17s. 4d.; received since for calls, 183. 10s.; arrears due for calls, 707. 4s.; tin sold, but not in account, 83. 18s. 6d. = 1159. 5s. 10d.—The liabilities: Sandys, Vivian, and Co.'s draft due, 4th Jan., 400s.; ditto for stamps, 111. 16s. 2d.; Nov. and Dec. cost, 480s.; sundries, 29t.; leaving balance, 147. 9s. 8d. Captain John Davies reported that a great improvement in the mine had taken place, the shaft sunk to the 20 fathom level, and the ends extended east and west. In the former they had cut a shoot of ore seen in the level above; the lode was rich.

At Wheal Kitty meeting, on Wednesday, the accounts showed—Calls, 760.—Labour cost for Sept., Oct., and Nov., 452. 2s. 1d.; office expenses, 16. 7s. 8d.; bills receivable for ore sold, 2077. 13s. 5d. = 3257. 18s. 1d.—By labour cost for Oct., 706. 18s. 5d.; Nov., 553. 15s. 6d.; leaving balance in hand, 1954. 5s. The balance of assets over liabilities was 2634t. 16s. Capt. T. Carpenter reported that the lode in the 30 fm. level is 5 ft. wide, yielding 1 ton of ore per fm., worth 77. 10s. per ton. In the 35 west it is 5 ft. wide, yielding 2 tons of ore per fm., worth 82. 10s. per ton. In Cross's stope it is 3 ft. wide, worth 16s. per fm. In Burn's Creek, ½ to 2 prem.; Monarch, ½ to 2 prem.; L'Aigle d'Or, ½ to 2 prem.; Waller Gold, ½ to 2 prem.; Garnett and Moseley, ½ to 2 prem.; Australian Mutual, ½ dis. to par; Australian Consols, ½ to 2 prem.; Chartered Australian Land Mining Company, par, to ½ prem.; Pontgibaud Silver-Lead, 2 to 3 prem.; Anglo-Australian, ½ to 2 prem.; Verag uas, 2 to 3 prem.

At the Wheal Arthur meeting, on Thursday, the accounts showed—Balance in hand last account, 771. 19s. 8d.; calls, 400t.; carriage of ore, 3s. 5d.; travelling expenses, 6. 6s. 6d.; leaving balance in hand, 235. 0s. 6d. The balance of assets over liabilities (including Nov. and Dec. costs), was 1607. 10s. 6d. Captain John Davies reported that the new engine was set to work on the 30th Nov., and has proved, with the boilers, in first-rate order. The water is now in fork 32 fms. below adit, and in a week the pitwork would reach the bottom of the shaft. Generally, it may be observed, with regard to the North-American gold companies that, although there has not been much enquiry for them, they have sustained their position; sales have, however, been effected both in Waller's and L'Aigle d'Or. The transactions on the Stock Exchange will be found in the usual place. The non-official quotations are—Peele River Land and Mineral Company, 14 to 15 prem.; Nugget Vein, 3½ to 3½ prem.; Burn's Creek, ½ to 2 prem.; Monarch, ½ to 2 prem.; L'Aigle d'Or, ½ to 2 prem.; Waller Gold, ½ to 2 prem.; Garnett and Moseley, ½ to 2 prem.; Australian Mutual, ½ dis. to par; Australian Consols, ½ to 2 prem.; Chartered Australian Land Mining Company, par, to ½ prem.; Pontgibaud Silver-Lead, 2 to 3 prem.; Anglo-Australian, ½ to 2 prem.; Verag uas, 2 to 3 prem.

At Wheal Golden, South Tamar, Callington, Trelawny, and Cairnsmore, have sold lead ores during the week.

East Pool, Polberro, and Union, have sold tin.

The Polberro Mines have sold during the past year 333 tons 14 cwt.

At Balnoon Consols Mine made a profit of 1586t. in Oct. last.

At Devon Kapunda, the engine-shaft will be down to the 22 fm. level by the end of next week; in sinking below that level, the two fine lodes seen in the cross-cut south will soon be intersected by the shaft, and at the next level below the copper lode, which has been opened in the 22 fm. level at the old underlaying shaft, where it is nearly all saving work, it will be cut into, and may be expected to produce good and profitable work. The lode in the 14 west is just as last reported. The tributaries' ore will be dressed as soon as possible. Batters' shaft will be cased and divided from the 14 to the 22, and the driving of the 22, under the lead ground, continued.

At Devon Burra Burra, nearly 4 fms. had been driven into the great Brake lode, and no north wall seen; some fine stones of ore were broken, intermixed with tin, and quantities of black ore were washed out of the lode, giving the mine the appearance of a colliery. Since the above report was received a leader of tin, embedded in a fine capel, has been cut in the lode about 2 ft. wider, intermingled with black and grey ore. It is considered that the product of this part of the lode will be equal to all the expenditure of the mine; the lode is not yet cut through. Two pitches are now set in the south and middle lodes, upon the former of which the finest stones of ore yet seen in the mine had been broken. Every part of the mine is rapidly improving.

The Union Tin Mine, as shown by the captain's report, has now gained a position in the list of mines which have sold ore; and from present appearances there is every hope of its being soon placed with the dividend mines. The report of the 13th Dec., states that the lode is 9 feet wide; subsequent reports are still better—the ends extended 8 fathoms; 500 sacks of work were stamped, and several hundred more at the surface. The size and quality of the lode continues, and since that date upwards of 60t. worth of tin has been sold, the produce of three or four weeks' stamping, with only three heads. The eastern and western driving, on only half the lode, will more than supply the stamps twice over, and hence there is a necessity for increased stamping power. The lode may be worked on for 400 or 500 fathoms. The ground is soft, the expenses, therefore, will be trifling; and there is no doubt but that 20 tons of tin per month will be sold from the shallow levels.

During the week, shares have changed hands in Alfred Consols, West Providence, Tremayne, Bassett, Merlin, South Tamar, West Caradon, Kirkcudbrightshire, Trelawny, Conduor, Bedford United, Mary Ann, Black Craig, Trebene, South Frances, Cook's Kitchen, Treleigh, Wheal Reeth, West Dine, Doding, Tregardock, Gomena, South Phoenix, South-West Phoenix, Great Phoenix Consols, Wheal Robert, Crox Hill, Clive, Cubert, Wheal Fortune (South Tamar), Elizabeth, Cawdor Pool, Coniston, Great Wheal Tonkin, Great Wheal Alfred, East Polgoon, Great Wheal George, Bix Hill, East Crowland, East Tamar, East Gunnis Lake, Hindgton, Great Badern, North British Burra Burra, St. Day United, Wheal Samson, Weston, Monarch, Hennoek, Union Tin, Great Crimlyn, Zion, Arthur, Wyndham Consols, Penzance Consols, St. Austell Consols, Boscar, Boscawen, East Balnewd, Wheal Carnie, Wheal Augusta, North Trelawny, Cawdon Hill, Great West Roskarn, Treworlos, Royal Hibernian, Kennmare, Mining Company of Ireland, Clasadaugh, Mizen Head, Connemara, South Cork, &c.

In Foreign Mines, transactions have taken place in Alten, Linares, Grand Duchy of Baden, Imperial Austria, Burra Burra, Cobre, Copiapo, Santiago, St. John del Rey, United Mexican, Jamaica, Worthing, &c.

Advice has been received from the Alten Mines, from which it appears that the 30 fm. level west is poor at Raipas; the stope are looking well, and yield good returns. At the Old Mine the tribute returns increase. The western slope, at Slung's, produces 4 to 5 tons per fm. At Michell's the pitches look better.

The Linares Mining Company have received advices to the 18th Dec. Oct. weighed in, 91 tons 4 cwt.; total in stock, 381. tons. The engine is now drawing direct from the bottoms. The 55, west of Buena Ventura winze, is worth 1 ton of ore per fathom. The stope in the 55, between San Anton and Las Nieves, produce 3½ tons of lead ore per fm.; the 45, east of Esperanza, 1½ ton; La Suerte winze, below the 31, is worth 2 tons of ore per fathom; the 31, west of San Juan, ½ ton; east on the north lode, 3½ tons; west, 1 ton; the 31, east of Thorne's, 2½ tons per fm. The tribute pitches are yielding fairly.

The Royal Santiago Mining Company have advices to the 24th of Nov. The mining force is confined to the stope east and west of Taylor's and the 32 cross-street to Thompson's. Owing to the cholera prevailing, the greater part of the labourers are at the hospital. The stope are turning out well—east, 8 tons of copper ore per fathom; west, 3 tons. They have only been able to clean 40 tons.

At the Australian Mining Company's special meeting on Thursday, the report submitted by the directors was of the most satisfactory character; it gave an outline of a voluminous one by Captain Hitchins, who had recently arrived from the colony, showing that very great mismanagement had taken place, and

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"Totally at variance with all the absurd dogmas connected with an igneous theory."

"We must conclude at present by unhesitating recommendation of the work to general perusal."—*Mining Journal*.

"We strongly recommend a complete study of this work from beginning to end, so that not only the connection of all its parts may be clearly understood, but that the manner in which the author has throughout kept within the boundary of demonstration may be duly appreciated."—*Atlas*.

Richard Taylor, Red Lion-court, Fleet-street; and *Mining Journal* office, No. 26, Fleet-street, London.

Notices to Correspondents.

THOMAS PHILIP COMPANY, AND EVAN HOPKINS, Esq.—Sir: I agree with my brother-adventurers in the value of our superintendent, and think he ought to be as much prised as the Australian Agricultural Company prize their golden plains. For what they already possess, the boundless talent and energy of Evan Hopkins will, undoubtedly, secure yet far richer plains, and a more brilliant harvest for the Port Philip Company.—C. F. Dec. 31.

"J. P." (Glasgow).—Quartz may be rendered more friable by calcination, but by crushing by some of the new machinery it might be rendered more available.

SIR.—Will any of your intelligent correspondents obligingly instruct me as to what amount of information a registered shareholder of a Cornish mine, having an office in London, may there apply for, and reasonably expect to receive? I know that the weekly reports from the mine may be there inspected; but what I particularly wish to ascertain is, how the days and the amounts of the proposed sales may be previously known. I perceive they are regularly published in the *Mining Journal*, but there I see them only at second-hand, and in common with the public; but, as my dividends depend on the ores sold, and the value of my investment is determined by these sales, I should presume that there should be some means of access to this information for shareholders, at least as early as any other parties. Now, I have not seen in any of the weekly reports from the agent any such notice as above alluded to.—*Inquirer: London, Dec. 30.*

NORTH DAMEL.—"X. Y." is informed that this mine is about half a mile from the western part of the United Mines, and upon parallel ledges. It was until last year known as West Wheal Jewell, when it was sold at the Auction Mart, to Messrs. T. Field and Francis Pryor, who have continued working it, but as yet have declared no dividend. If our correspondent wishes further information, he must apply at Crown-court, Threadneedle-street.

TRENDY MINE.—"A Shareholder" wishes to be informed why the committee do not convene general meetings of the shareholders every two months, according to the rules and regulations of the mine?

"A. O." (Greenwich).—The principle propounded in the paper on the New Theory of Light, recently read before the Royal Astronomical Society, by Mr. G. F. Harrington, of Portsmouth, contains on a first view some startling deductions, but which appear to us, on close investigation, to be wholly untenable. He assumes that the sun does not shine upon us in such manner as to produce daylight in the way we have always supposed, but that what is called "solar light" is produced by its action on certain gases given off by our earth: these, as fast as generated, are forced up through the air by the gravitation of heavier vapours, until they reach the upper limit of our atmosphere, where they are ignited by the sun, producing a lambent flame, called daylight. His view of the prismatic spectrum, that seven gases, giving the seven different colours, are exploded; by no other means can he account for what becomes of the immense quantity generated on the surface of the earth, forgetting that they are being continually reconverted. In fact, the whole theory is so opposed to all our practical experimental knowledge of the laws of nature, that we think it can raise but little discussion.

"A Shareholder" (Northampton).—The shares have never been quoted, either officially or otherwise. The company has never had any reputation, and we believe it is in course of winding-up.

MINING AS AN INVESTMENT.—Sir: Will your correspondent, "Argus," (of Truro), have the goodness to explain whom he means by the "gentry" who represent mines paying 20 to 25 per cent. interest of money? The term, if properly applied, is not to be quarrelled with, but I apprehend that "Argus" puts it forth in an ironical sense. The censor is always useful: it is quite as easy to be courteous as vulgar. Every one who studies the matter knows quite as well as "Argus" that there is no absolute certainty of any mine continuing to pay a given rate of dividend, because all mining must be, more or less, uncertain. In what respect does mining property, well selected, succeed to any other investment? Railways will pay about 3½ per cent. (the best of their average), and the funds 3 per cent. All well managed mines are continually opening new ground. Let "Argus" point out those who do not, and wait the contradiction, instead of a sweeping condemnation like that just ventured upon.—*A Mining Broker: City, Dec. 31.*

"A Miner" (Cambridge).—The accounts received of individual success at the gold diggings are perfectly true, but no statistics have arrived of the failures.

RAILWAY BOOK-KEEPING.—"A."—A system founded on the Italian method, by double entry, long adopted in all large establishments, is used in railway offices. There are plenty of treatises to be obtained at the booksellers; but from the complex nature of the arrangements and vast extent of business done in a peculiar manner, as compared with regular trading, nothing but considerable experience in a railway office can render a person *au fait* to the subject.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—The 2000 shares allotted at the meeting in January, 1852, were to the original directors of the company. Those gentlemen who are directors of the Alliance Gold Mining Company (with one exception), did not participate in the allotment.

"A. X." (Regent-street).—Mr. J. Y. Watson, F.G.S., may be consulted upon any mine mentioned in his review, published in the *Journal* of last week, on application to him at Messrs. Watson and Cuell's, No. 1, St. Michael's-alley, Cornhill. The other question of our correspondent we are not in a position to answer at present.

"W. B." (Tavistock).—The proper period for giving notice of a meeting is that agreed upon by the adventurers. The purser is the proper person to sue, which he may do in any court he pleases, and should be prepared to answer any pique which may be put in justification; the excuse about the meeting not being held precisely at the time is nothing, and cannot avail him.

BOSCARNE MINER.—"Inquirer" wished for some information respecting the constitution of this company; having been induced to become a shareholder, he finds that no meeting has ever been held, no accounts submitted to the proprietary, and that no cost-book exists. Another peculiar provision connected with these mines is, that the whole of the 15,000 capital shall be expended in working the mines, whilst the gross produce of ore, &c., shall be paid in dividends. As we have had other similar inquiries, perhaps some one connected with the management will send a reply.

"G. S. B." (St. Leonard's).—The promised scrip of £1,000, in lieu of the 15*l.* paid-up shares, has not yet been issued to the original proprietors of the Asturian Mining Company. We have made some remarks on the conduct of the trustees, which will be found in another column. As far as we know, that is the present position of the company.

"R. H." (London).—The best way is to enquire through a respectable broker. The directors of the latter association alluded to are on the board, and have not repudiated their connection with the company, as in the case of the other association referred to; they are men of high standing, and would not willingly lend themselves to a delusion.

"A. P." (Belgravia).—Some of the old stock of the Copper Miners' Company was sold at Garraway's a short time since by order of the Court of Chancery, and realised the sum of 9s. in 1*l.*

GREAT BRITAIN MINE.—"A Shareholder" who complains of some items charged in the accounts, as presented at the last meeting, should have attended thereto, and made the necessary inquiries respecting them; when, had the explanation not proved sufficient, they would, doubtless, have been disallowed. Having passed, it appears useless to question their propriety; and as auditors are now appointed, there can be no doubt that all will go on well in future.

"T. B. C." (Liverpool).—It is our intention shortly to give an account of all the gold which has been entered through the Custom House in the past year.

In answer to the enquiries of "Britannia Shareholder" (Barnstaple), we can have no hesitation in expressing our conviction that the call made on the Britannia shares, under the present position of the company, is at variance with the true spirit and rules of the Cost-book System, and that shares cannot be forfeited for non-payment of the call. The purser has the power to call a general meeting of the shareholders.

"W. G. J." (Swansea).—As the pressure of the atmosphere will only sustain a column of water from 33 to 34 ft. high, it naturally follows that fluid cannot be raised from a greater depth by means of the siphon. In practice generally it is, perhaps, hardly safe to depend on a greater depth than 30 ft.

"S. T." (Bury).—The office of the Silver Valley and Wheal Brothers Mine, is in Hatton-court, Threadneedle-street, and Mr. W. Lee is the purser.

"J. F." (Whitehaven).—We are not aware of the mode of preparation or materials employed in the composition mentioned by our correspondent; we have, however, in the course of the past few years inserted in the *Journal* several recipes for lubricating compounds, generally for railway use, of undoubted superiority over common oils, fats, &c. We should think the most probable way to obtain the information required would be by an advertisement.

"A. M. Z."—The remarks have appeared at different periods during the past four or five years. The book volume of the *Journal* should be searched for the information.

THE MINING GUIDE.—Repeated applications having been made for particulars respecting the locality and officers of the various mining companies, the proprietors of the *Mining Journal* purpose preparing a *Mining Guide*, containing the names and addresses of the purser, captain, and committee, of each company, to be published as a companion to their *Mining Glossary*. That the *Guide* may be perfect, purser and secretaries are solicited to furnish the required details, viz.:—

Name of mine	Captain
Product	Committee
Where situate	Secretary
Purser	Offices

To which will be added, a LIST OF ALL MINING AGENTS AND DEALERS IN SHARES. The proprietors would feel obliged by the above information being forwarded, or an intimation where it can be procured, to the Editor, *Mining Journal*, No. 26, Fleet-street, London.

MINING GLOSSARY.—For the convenience of new adventurers, and others requiring the information, we have prepared a Glossary of English and Foreign Mining and Smelting Terms: it is neatly printed in a useful form, and can be obtained through any bookseller, or at our office, price 2s.

THE COST-BOOK SYSTEM.—So much interest being evinced for information respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsman, or at our office, price 1d.

* * * The INDEX and TITLE-PAGE to our TWENTY-SECOND VOLUME will be published with next week's *Journal*. Those of our subscribers who require any particular numbers, to make their sets complete, should make early application. We may take this opportunity of recommending that the *Journal* should be filed weekly, for the purpose of binding at the end of the forthcoming year, it is then useful for occasional reference, and is carefully preserved, as we are frequently unable to supply missing copies, and thus some volumes necessarily remain imperfect.

* * * It is particularly requested that all communications may be addressed—

To the EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 1, 1853.

The great results of the EXHIBITION OF THE INDUSTRY OF ALL NATIONS in 1851, ending as they undoubtedly will in the establishment of a permanent museum of inventions and works of art, which may serve as an historical record of the ingenuity of the age, must mainly be attributed to the efforts of the council of the Society of Arts in 1848, when they commenced a series of annual exhibitions of productions of the previous 12 months. Such a museum as is now being established at Sydenham will also show the progress of the past, the direction in which inventive men are working, what has already been accomplished in each separate department of art, and, by a comparison of the efforts of various minds at different periods, will form the best groundwork and guide for future practice.

Encouraged by the success of the first Exhibition, which exceeded the expectations of the most sanguine, it was deemed expedient to continue the course thus commenced, and it is highly gratifying to find that for the present session, which opened on the 16th Dec., and closes on the 31st inst., shows a progressive improvement. The present Exhibition contains a collection of articles invented, patented, and registered since Oct., 1851.

The catalogue contains a list of 190 exhibitors in the mechanical arts, many of which promise to be of great public utility, and have been noticed in the *Mining Journal* during the past year. Among these we may notice a ROTATIVE ELECTRO-MAGNETIC ENGINE (by M. FROMENT), in which each magnet begins to act when the keeper is nearly close to it. The keepers are brought into position by an eccentric motion, by which means the great loss of power that generally takes place in these machines is said to be avoided.

GALVANIC APPARATUS WITH CONSTANT BATTERY (R. WEARE), the battery of which is said to be permanent, and the power to increase the longer it is at work. The power is regulated by a fixed scale.

FENDER FOR RAILWAY CARRIAGES (A. T. FORDNER), to prevent injury in cases of collision, by absorbing the power in the distribution of steel plates by means of corresponding metal rods.

GOLD WASHING MACHINES.—Of these there are four, by T. STARKEY, F. BARNES, RICHARDSON, and LYON. They are severally ingenious and practical in operation. The real value of either of which must, of course, be carried in practice.

MINERS' SAFETY-LAMPS.—Of these there are also several by SIMONS, WATSON, and THORNTON, which we have fully noticed before. In one modification of SIMON'S lamp, an attempt to open it immediately extinguishes the light, and it can be fixed to the front of the miner's cap.

Among the philosophical instruments, we noticed a deviation compass, by Capt. WALKER, R.N.—the object of which is to obviate or neutralise the defects of the existing compass, and to produce an instrument capable of indicating the course of a vessel with correctness, both in fair and foul weather, and when under the agitation arising from either internal or external causes.

A very beautiful apparatus is exhibited by M. FROMENT, illustrating the rotation of the earth, exemplifying the pendulum experiment of M. FOCAULT. An altometer, by FONTAINE MOREAU, for measuring accessible and inaccessible heights by very simple calculations, and which may be carried in the pocket.

In looks there are some recent improvements by HOBBS and PARRELL, stated to bid defiance to picking; and the numerous other articles in agriculture, hardware, navigation, and for miscellaneous uses, give a gratifying view of the progress in the arts made since the close of the Great Exhibition.

It is clear that these annual revivals, bringing into focus the results of inventive genius of the previous year, have been productive of vast public good; and while we would allow great merit to the council for the persevering efforts they have made to bring the proposal to a successful issue, we cannot, in justice, omit the name of FRANCIS WHISHAW, with whom the idea undoubtedly originated, and to whose exertions and inquiries the council are indebted for the principal portions of the data on which the whole fabric was erected.

Our readers may remember a statement we put forward last week from our correspondent in Madrid, stating that M. PAULINETTE, the manager for the Duke of RIANZARES of the property formerly belonging to the Asturian Mining Company, had promised a small dividend in June next—that they were now making 6 tons of iron daily, and shortly hoped to increase the make to 10 tons. It is with regret we are induced to make any remarks on this ill-fated association, but justice to the unfortunate British shareholders will not allow us to be silent. The causes of the original failure of the association we do not wish now to enter into, neither its subsequent phases while under the liquidation. When the liquidators were ejected, the so-called trustees promised in August, 1851, that if those shareholders who had paid up 15*l.* would accept one-half their interest (viz., 7*l.* 10*s.*) they should have in the new concern, in the October following, 10*l.* shares to the extent of their then remaining interest. From that period to the present time they have received no further information, or the shares which they bargained for. From what cause this has arisen the trustees have never condescended to explain, and all remains in *tenebris*. After expending over 200,000*l.*, surely some explanation, if nothing else, is due to those who have invested their money, and afterwards relinquished a large portion of their interest on the faith of the trustees. Have these gentlemen any agreement with the agents of the Duke of RIANZARES? If so, have they fulfilled the stipulations they entered into? Surely this should be inquired into. The situation of the shareholders at present is so bad that it can hardly be worse; under all circumstances, it would be better for them to know what they have to expect. To attain this object a public meeting should be summoned, and the case honestly and fearlessly laid before the shareholders. If the trustees have been duped let them acknowledge it; they will then be considered less culpable than if they have received money, and withheld it from their constituents. We candidly state we know not in what position they are, but we reiterate it is due not only to their constituents, but to their own character, to come forward, and by a lucid statement of facts dispel the doubts that are already engendered, and vindicate themselves from the suspicion which is thrown on their character by the dilatoriness of their movements, and the absence of information of any kind whatever.

The evidence given at the Coroner's Inquest on Wednesday, at Harrow, on the body of JOHN BARTHOLOMEW, the guard who was killed by the late accident to the Liverpool and Manchester express train, demonstrates in the clearest manner the extreme care and caution exercised in the construction of the works and machinery by the London and North Western Company, and that every means within reach of the executive is employed for the safety of the lives and limbs of passengers, and the security of the railway property. It is too much the custom to assert the contrary; but although certainly many cases of recklessness have been brought before the public, we think the balance is in favour of the officials generally. The proceedings, upon the whole, were highly interesting; and such inquiries must greatly tend to circulate the most useful information on the subject of railway construction, and, consequently, to the decrease in the number of those unhappy and fatal accidents.

It appears the accident occurred from the breaking of a tyre, through inefficient welding; and, previous to the inquiry being entered upon, an experiment was made before the coroner and jury, to test the strength of the iron of the broken tyre. It had considerably opened, and was placed securely in a groove, when a "monkey," weighing 18 cwt., was raised by means of a triangle to a height of 7 ft., each foot being equal to a ton in addition. It was then let fall, and the effect was to close the aperture, measuring 30 in., 5 in. From a height of 20 ft., the opening closed 7½ in. more, but no fracture took place; a piece was then separated by nipping, and the metal presented the most beautiful and fibrous appearance. Mr. EDWIN CLARKE was deputed to examine the iron, and gave

his opinion that the accident occurred from defective welding. Mr. SHARPE, of the firm of SHARPE, BROTHERS, AND CO., Manchester, said, that out of 730 locomotive engines which they had manufactured, he had known only three instances of fractures of tyres. The evidence of Mr. MC'CONNELL and CAPTAIN HUISH showed the vast extent of the company's works at Wolverton and elsewhere; they weld 3000 tyres a-year; there are 30,000 tyres at work of their own welding; and witness had only known of one fracture during six years' experience; they had 60,000 tyres on hand. CAPTAIN HUISH, in alluding to remarks which had been made as to more accidents having happened on their line than on any other, said, the only answer necessary was, that the London and North Western Railway was three times the length of any other, and it was natural that its accidents should be the most numerous. There were 11,000 servants in the company's employment, upon whose conduct the safety of the public in some degree depended, and it was impossible to prevent occasional accidents. During the past six months, from bad weather and other causes, such as the failure of bridges and roads, they had had greater difficulties to contend against than he had known in 15 years' experience; but he was happy to say these causes had now subsided, and matters were daily improving. The coroner gave the general management great credit for forethought, care, and prudence; and it was a remarkable fact, that during 12 years he had never held an inquest on a first-class passenger; but two or three each of second and third; and he should be very glad if the company would pad the second and third-class carriages, if with ever so rough a material, as, in cases of accident, the head coming in contact with the hard boards, frequently caused death. CAPTAIN HUISH said he would lay the suggestion before the board. The jury returned a verdict of "Accidental Death," and recommended a better system of testing the welded parts of tyres.

In another column will be found a report of the meeting of the ELECTRIC TELEGRAPH COMPANY OF IRELAND, held on Monday. From this it will be seen that this important company, who have the privilege of laying down lines in Scotland and Ireland, are favourably progressing, and had it not been for the unfavourable state of the weather, which in a great measure has retarded operations, would ere this have placed us in direct and continuous communication with the Sister Isle. The Admiralty agents have borne testimony to the efficacy with which the operations have been hitherto carried out, and no failure has yet arisen or likely to occur. The original intention of the company was to have been incorporated by Royal Charter, but as this probably might limit the sphere of their operations, they have thought fit to apply for an Act of Parliament, which, while at the same time it limits the liabilities of the shareholders, will give them further and increased power. The present capital is 40,000*l.*, and though sufficient is subscribed to carry out the present objects of the company, a power is reserved to them to increase it to 200,000*l.* if they deem it expedient. The annual meetings are to be held the first Thursday in June, and stringent provisions are introduced both for the government of the company and the efficient service to be rendered to the public. The bill was lodged on the 29th of December, and from the cursory glance we have obtained of its clauses, and knowing the important objects it has in view, we are of opinion that whatever ministry may be at the head of affairs, that every facility will be afforded for furthering this useful and national project. It was shown at the meeting that as soon as one branch of the line was in operation, a fair dividend would be declared; the future profits of the company naturally, in a great measure, would depend on the magnitude of their operations, and these, as soon as the communication is laid down and opened, will necessarily be so large from the extended intercourse, that present calculation must be considered futile, and only calculated to mislead.

Railroads and the facilities of steam have done much for civilization; electricity is yet in its infancy, and we know not what mighty results may arise from its application. The Electric Telegraph Company of Ireland, while affording remunerative returns to the shareholders, will be conferring a national benefit, when by their means the two islands are so united that a facile and instantaneous interchange of communication may constantly take place; and this will do more to heal party differences than any of the panaceas which have hitherto been ineffectual, and given rise to the remark that Ireland is England's difficulty.

Although we do not wish to enter into a controversy, or in

ent of it; and, while it would regenerate her impulses in every vein, an extensive emigration from this country would ease our political burdens here, give additional employment, food, and comfort to those remaining, and tend to the increased prosperity of both countries.

We would briefly call attention to the principal points in the advices under notice, and it will be seen that the total amount of gold brought to Melbourne, up to the end of August, was 1,771,974 ozs., which by the end of September was increased by 366,193 ozs. According to the present weekly yield, which is estimated at about 80,000 ozs., the gross annual sum will be about 14,560,000/-—an enormous amount, more particularly when we consider that, from all appearances even in localities at present known, the source of supply appears inexhaustible; while there are hundreds of square miles still untraversed, probably as rich; and it is more likely to increase than otherwise. Our South Australian correspondence will be found more than usually interesting, but, we regret to say, painfully so. Adelaide at this moment represents a “Deserted Village,” those who do remain, no doubt the largest proportion females, must be suffering innumerable inconveniences, privation, and much misery; and what renders the matter worse is, that it is impossible to foresee when such a state of things will end. In the rural districts the cultivators of the soil were apparently in an equally unenviable, if not still-more-to-be-lamented predicament; the waving crops were waiting for the sickle in vain; there were none to clip the wool, likely to rot on the sheep's backs, and, even could that have been accomplished, no carriers to take it to the shipping port; thousands of labourers could have found, and still can find, profitable employment; and we sincerely trust that Government will make an energetic move, and take such measures that thousands may be sent.

With reference to the report of the meeting of the Australian Mining Company, in another column, it is gratifying to be able in some degree to turn to a bright side of the picture; a voluminous and able report from Captain Hinchins, who has recently returned from a survey and thorough inspection of that company's property, has lain some time in the office; from which it appears there is every reasonable prospect of future prosperity. Under former managements, both of the surface and the mineral lands, great neglect, extravagance, and error, have been committed. The Tungkillo Mine really appears, after all, to be a valuable one, with much rich ore in sight, and only wanting an addition to the labour market, to bring to surface; they are within seven miles of the so-far-discovered gold fields, and possessing ample crushing machinery, are at once prepared to rush auriferous quartz, should such business become eligible. The expenses are reduced to the lowest possible limits; and they have sufficient funds in hand to carry on all operations at present contemplated. The report of the directors, of course principally founded on that of Captain Hinchins, gave great satisfaction; and the large number of shareholders, most of whom, at the former meeting, looked most gloomily at the aspect of affairs, went away with the cheering hope that they should yet get a considerable and permanent return for their investments.

It is but seldom we treat on matters put before the public in the shape of mining adventures, but so prolific have they become of late, that, with the close of the year, or, rather, the advent of that at hand, we deem it only an act of prudence to direct attention to our Share List. It will be found therein that there are some 500 or 600 companies, one-fifth of which, we readily admit, have realised large dividends at a comparatively slight cost; while, on the other hand, some 200 or more have embarked vast amounts, have sold ores, but never realised a profit, of which, however, many hold out good promise; while the remaining 250, being either new mines or old sets taken up, are to be looked upon with caution and inquiry; for although the present standard is such as to justify the working of ground hitherto held as valueless, yet no certainty can be assured of the advance or of the influx of foreign ores in the next 12 months; while, if the capital embarked on the new projects be at all profitable, we may well expect an addition of 50 per cent. on our returns, it being understood that no retrograde movement takes place in our present “producing” mines.

Judging from the encouraging prospects held out by the projects which daily present themselves, ample profits will be the result of the capital so employed, aided by energy, perseverance, and last, but not least, honest management. It, however, does in our opinion behove the capitalist and adventurer well to consider in what mine he embarks, what are its prospects, and who are the parties with whom he becomes connected; and, moreover, let him feel, without accounts be duly furnished, the responsibility which he imposes on himself, in so being connected with a mine adventure. It may, and doubtless will be said, that instead of advocating or upholding mining enterprise, we are, by our remarks, tending to destroy it; but we feel well assured that every honest miner and well-informed adventurer will give us credit for the motives which prompts us, at this early season of the year, to give the results of past experience.

There can, we believe, be no question that, of many of the companies formed with thousands of shares, were an inquiry instituted, it would be found that but a moiety—aye, even a paucity—were held by the public; the remainder, say even a third or a half, being reserved by the projectors, without any payment. In fact, we have only to cite two cases in the Sister Isle, where the one company, or body of directors, takes 50,000/- out of 60,000/- capital, the other 50,000/- out of 100,000/-, neither of whom have, we verily believe, expended 1000/- Without, however, naming A. or B., we would suggest to the capitalist and the mine adventurer to be somewhat cautious in embarking in mining pursuits, without first availing himself of the aid of those who, practically acquainted with mining enterprise, its “ups and downs,” and the prospects which enterprises, however “flowery” the language holds forth, may present. There are many honest, scientific, and practical miners, whose opinions may be readily acquired; and we would again suggest such should be availed of, when opportunity admits. In saying thus much, we feel assured that we shall not only have the good wishes and thanks of the honest miner, but of all those to whom we are so much indebted for the position in which we stand, and of which it is our pride to boast.

In another column will be found a report of a numerously attended and influential meeting at Helston, for the purpose of taking into consideration the propriety of expressing the confidence of the public in the character and prospects of the GREAT WHEAL VOR UNITED MINES, and to manifest a desire to afford the undertaking cordial support. The meeting was unanimous in their expression of confidence in the capabilities of the property. It is gratifying to find that so valuable an undertaking has been entirely relieved from any connection whatever with the litigation of former years; and we look forward to see this adventure take its proper position in the mining world.

[FROM A CORRESPONDENT.]

A detail of the first principles of law within which the Cost-book System is placed by our most authoritative jurists, may tend in no small degree to render our notions upon that subject clearer and more exact. Our readers are aware that the whole municipal law of England is commonly divided into two kinds—namely, the *lex scripta* (or written or statute law), and the *lex non scripta* (the unwritten or common law), or more properly the *jus quod constat ex scripto aut ex non scripto*.

Now, it is indisputable that the Cost-book System does not owe its origin to a *lex*, for such assumes a commencement by writing—that is, that the system became a legal fact by virtue of some written instrument, wherein its terms are detailed. That there is no such instrument is by all impliedly admitted, for if such existed its terms, if intelligible and sufficient, would have obviated all that difference of opinion entertained by several of our distinguished contributors. The Cost-book System is not a *lex*.

Not being a *lex*, it must (if a legal fact, or a binding rule of civil conduct, which all admit by the fact of discussing its merits and extent) be within the category of those *jura que constant ex non scripto*, which embrace not only the customs general to all the inhabitants of this kingdom, or the “common law,” properly so called, but also the customs particular to certain parts of the kingdom, and likewise those particular laws that are by custom observed only in certain courts and jurisdictions. Of these three, jurists under the *particular laws* lastly referred to place the Roman and canon laws, and those jurisdictions which restrictively decide in accordance with those laws.

As it is not contended that the Cost-book Principle is the offspring of either the Roman or canon law, it, to be law, must be within either the first or second of *jura que ex non scripto constant*. Indeed, the whole *veritas questio* is, that the system by the Cornish men is said to be within the second category—that is, a *local custom*; whilst the rest of the mining community state it to be within the first—that is, *common* to all the inhab-

itants of the kingdom. Now, as the system exists as a legal fact, it is not *prima facie* a particular custom; also, as it has not, as we maintained in our impression of the 11th Dec., a feature in derogation of any principle of the common law, so it is open to the adoption not only of all mining but other trading communities. It would, however, require too much of our present space to detail all the arguments and data on the one hand incontestably to show that it is not a local custom, and on the other that it forms part of the law common to all the inhabitants of these realms. We, therefore, for the present, state our conclusions without the argument, and assert that the Cost-book System is part and parcel of the common and general law of this land; and not local or proper to the Stannaries' jurisdiction, for that as in its obligations it is not confined to a particular district, so it cannot, with propriety, be considered as a *custom* in the technical, legal, and proper sense of that term.

We are happy to be enabled to remove some little misapprehension which appears to have arisen with regard to the registration of the shares of the SOUTH AUSTRALIAN COPPER MINING COMPANY. An advertisement put forth during the past week, requesting that their shares may be presented at the office, so that their numbers only may be taken, in order to enable the directors to distribute the few remaining unallotted shares, at par, amongst the present fortunate holders, and further to divide amongst them a bonus which has accrued from the sale of shares at a premium, has given rise to an idea that complete registration is intended. Such is not the case; and an official letter written by the chairman to the brokers of the company, and by them posted in the Stock Exchange on Wednesday last, fully sets this matter at rest. It is to the effect that nothing more than the numbers of the certificates is required, that no deed or signature is necessary, and that the shares will continue to pass as freely from hand to hand as at present, not requiring any transfer whatever. Without this calling in it would, of course, be utterly impossible to divide either bonus or unallotted shares; and as a bonus is already in hand, and a dividend shortly expected from the arrival of the 250 tons of ore, ordered in June last to be shipped for England, the necessity for an account to be taken of the shares must be apparent. This has been purposely contrived, so as not to occasion the least inconvenience to the holders; and we cannot but congratulate them upon the necessity for such a step, which bespeaks the near approach of a return for their investment. In fact, from the large extent of freehold property actually held by this company being within 10 miles of the gold field recently discovered on the Onkaparinga, it is fully expected that this tract of land forms a part of the same gold-field.

THE IRON TRADE.

[FROM OUR CORRESPONDENT AT BIRMINGHAM.]

Dec. 30.—The anxiously-desired preliminary meeting of the iron and coal masters of South Staffordshire and Shropshire, held this afternoon, at the Swan Hotel, Dudley, was most numerously and influentially attended. All the large firms were represented, there being amongst others present the following gentlemen:—M. Grazebrook, Esq., chairman, William Mathews, Esq., W. Williams, Esq., B. Williams, Esq., W. Forster, Esq., Job Haines, Esq., Messrs. Smith, Barrows, Browning, Sparrow, &c. The business commenced at three o'clock, and continued until four. The proceedings, of course, were strictly private, but at the conclusion, I was favoured with the following results:—“Advance of 20s. per ton, and an advance of the wages of the workmen in proportion.” There was not a list of prices quoted, nor do I believe an accurate list could well be given, for although an advance of 20s. has been declared, a still greater advance may be in many instances required and obtained.

By many extensive manufacturers, who are deeply engaged in supplying foreign orders for made goods, the decision of to-day will be held to be highly injurious; whilst on the other hand, the orders in the master's books from other quarters are said to be so extensive as to fully justify the advance. In anticipation of to-day's meeting, a letter received last week by one of the most respectable and extensive merchants in Birmingham, from an equally respectable firm in Glasgow, was published in one of our local journals on Saturday, evidently with a view of pointing out the injurious results likely to follow from a further advance of iron. The writer confidently asserted that the present high prices were not the result of a greater consumption than the powers of production; and after giving some statistical information in support of his opinion, attributed the present extraordinary state of the market to the operation of English capitalists, who are said to be in possession of the large stocks of Scotch iron. This expose, at it was considered, was deemed likely to prevent the result of that day's meeting, if not to have led to a reduction upon the declared prices of last quarter. Such, however, has not been the case; and the most recent reports from the entire district are of the most flattering description. The principal drawback upon the iron trade is the deficiency of coal; for although nearly 1000 tons a-day arrive in Staffordshire from Derbyshire by the Staffordshire Railway, and quickly distributed amongst the large works, the supply is still infinitely below the requirement, and the prices are advancing. Another rise of 2s. per ton has been declared this week upon coal and lumps, making the price of best coal, at the pit's mouth, 13s.; common and furnace, 11s., and lumps, 10s. This is 1s. per ton more than when the colliers had 6s. per day, in the years 1845-6-7. Next in importance to the advance upon the price of iron to-day is the unexpected advance of 4s. 10s. per ton which has just been declared upon the price of tin, and which I can have no hesitation whatever in saying will most materially affect many manufacturers.

The following trade list has been circulated since the 27th amongst the customers of one of the largest houses in the trade:—“An alteration has been this day made in the prices of tin, of which we beg to inform you. Tin, in blocks, 10s. per cwt.; tin, in ingots, 10s. 6d.; in bars, 10s.; refined, in blocks, 10s.; plate, grain, 11s.; fine granulated, 12s. per cwt.” And in addition to the above advance discounts have been reduced from 1 $\frac{1}{2}$ to 1 upon the long credit, and from 2 $\frac{1}{2}$ to 2 upon cash transactions. A scarcity of the article is also reported, which by some is attributed to the operation of large capitalists rather than any actual deficiency. The consumption, however, for Australia has been unprecedented, and the demand for manufactured articles for that colony may in no small degree, if not entirely, account for the present state of the trade. In addition to the above important advances upon iron and tin, an advance is daily expected to take place on copper, and considerable uneasiness is in consequence felt throughout the trade. Of the scarcity of this article there can be, I fear, little doubt, and added to this, the alleged small profit of the smelters constitutes the ground for the contemplated advance. The following prices were quoted to me to-day by the largest house in the trade in Birmingham:—Tin copper, 10s. 10s. per ton; best selected, 10s. 12s.; other qualities ranging accordingly; strong sheets, 11s. per lb. Under the above circumstances, although they present, on the whole, a sound state of commerce, so far as abundant orders and advancing prices can be taken as an index, there is, nevertheless, a good deal of anxiety and doubt as to the future; and doubts are, perhaps, not unreasonably entertained as to the final results of such an unusual state of things. Every mine in the district that can be set in motion now finds a capitalist to work it, and speculation is now actively engaged in this district with respect to mines to be discovered in Wales have been privately exhibited within the last few days, and large offers are said to have been made for the property. The general trade of this town is good, workmen are fully employed, and in some branches, particularly in the glass trade, are making overtime.

ACCIDENTS IN MINES.

Half-yearly statement of accidental deaths in the North of England (Durham, Northumberland, and Cumberland) coal mining district, from November, 1850, to and with 31st December, 1852:—

	Deaths in shafts.	Explosions.	Choke damp.	Falls of stone.	Sun-dries.	Total.
1851—June 30, eight months....	13	8	1	21	29	72
Dec. 31, six months....	5	49	0	15	19	88
1852—June 30, six months....	17	33	1	19	27	97
Dec. 31, six months....	10	4	0	26	16	56

MATT. DUNN: Mine Inspector.

PREVENTION OF INCrustATION IN BOILERS.—Mr. Overman recommends to use charcoal to prevent incrustations in boilers. That made from hard wood is preferred, and is to be broken up into lumps from $\frac{1}{2}$ to $\frac{1}{4}$ in. cube, and then thrown into the boiler, in the proportion of two bushels to a boiler of 20 or 30 horse-power. At the end of a month it will require to be renewed. It is said not to condense the salts of fixed alkalies, as those of potash and soda, but will effectually absorb all salt of lime, alkaline earth, salts of iron, and almost all other heavy metals.

THE MINING GUIDE.

We now particularly direct the attention of parties concerned to the information we require for the MINING GUIDE—

Name of Mine.	Captain.
Produce.	Committees.
Where situate.	Secretary.
Purser.	Offices.

And the NAMES and ADDRESSES of all MINING AGENTS and DEALERS IN SHARES.

As the MINING GUIDE will be published within a month, it is hoped the necessary particulars will be furnished with as little delay as possible.

The object of the MINING GUIDE is to afford a means of communication between inventors and others, with parties connected with the working and management of mines, to introduce manufactures applicable to mining purposes, acquire information, &c.

LIST OF PATENTS COMPLETED UNDER THE NEW LAW.

J. Macmillan Dunlop, Manchester—Manufacture of wheels for carriages. A. Campbell Duncan, Glasgow—Improvements in the art or process of dyeing cotton, or other textile fabrics, or cotton with other yarns, when printed or mordanted with the colouring matter of madder, or of dyo-woods, and in machinery or apparatus employed therein. E. Petit, Kingsland, and J. Forsyth, of Caldbeck, Cumberland—Improvements in spinning and drawing cotton and other fibrous substances, and machinery for that purpose. E. Lloyd, Dee Valley, near Corwen, Merionethshire—Improvements in steam-engines, the whole or part of which are applicable to other motive engines. J. Wormald, Manchester—Machinery or apparatus for roving, spinning, and doubling cotton, wool, or other fibrous substances. J. Lavater, of Grenelle St. Honore, Paris—Improvements in the apparatus for measuring the inclination of plane surfaces and angles formed or to be formed thereon.

PATENTS SEALED UNDER THE OLD LAW, SINCE THE LAST LIST.

W. E. Newton—Steam and other gauges. R. A. Brooman—Mowing, cutting, and reaping machines. W. Ricardo—Gas burners. Carter—Propelling. J. Field—Transferring and printing. W. Brown—Preparing and spinning fibrous materials. A. V. Newton—Railway chairs. J. Palin and R. W. Sleiver—Brewing, &c. W. E. Newton—(1) Sewing apparatus, (2) Registering apparatus for carriages. E. H. Jackson—Artificial light and motive power. E. B. Bright and C. T. Bright—Telegraphic communications and apparatus. W. Reid—Electric telegraphs. W. Boggett and G. B. Pettitt—Obtaining and applying heat and light. J. C. Wilson—Manufacture of flax and other fibrous vegetable substances. R. M'Gavin—Manufacture of iron for ship-building. H. N. S. Sharpen—Extracting gold and other metals from earths or minerals. J. Lamb and J. Menday—Kilns, and generation of steam. J. Walker—Treating cotton-seeds, and distillation. P. M'Anaspie—Cement, and similar compositions, for building purposes. J. Crowther—Hydraulic crane or engine, motive power, and loading and unloading. L. Arnier—Steam-boilers. T. P. I. de Fontaine Moreau—Articles of dress. C. Liddell—Electric telegraphs. J. Weems—Metallic pipes and sheets. A. Fulton—Hats, and coverings for the head. W. Petrie—Obtaining and applying electric currents, refining certain metals, production of metallic solutions and certain acids. A. E. L. Bellford—Springs for railway and other carriages. M. Poole—Elastic sticks or pieces for umbrellas, parasols, and other articles where whalebone is now employed. L. Pocock—Rendering sea and other water pure. P. S. Lemaille—Preservation of japanned leather.

THE IMPROVED HYDRAULIC SYPHON.—In the *Mining Journal* of the 9th Oct. last, we inserted a communication from Mr. F. C. Monats, descriptive of the principles of his new hydraulic siphon, and the advantages to be obtained by its use over the general system employed for raising water. We have now before us a diagram of the means of constructing the siphons, and placing them in position for raising water to any height, or from any depth, that may be required, and the advantages assumed by the patentee are evident. The principle is that the water is not lifted in one upright pipe, but raised by a succession of tubes (say 30 ft. each) with an accompanying cistern and valves, on the principle of the force-pump. One continuous piston-rod runs through the whole, passing through stuffing-boxes, and carrying a piston in each tube, and a continuous stream is thus continued on the application of motive-power. The valves are of peculiar construction, entirely free from friction, and the cylinder being only of the same diameter as the tubes, instead of twice the diameter as at present generally in use, there is an avoidance of a cost of power from this source alone four times as great on the part of the atmosphere as that of the piston. In raising water from deep mines, the inventor estimates a saving of power equal to 100 tons, at a depth of 300 feet, and for obtaining a motive-power for turning machinery, a siphon with a double cylinder may be applied, and the water may be returned from the buckets if required, to make good the supply. The usual high pressure on the pipes is avoided, and the whole system appears to be based on sound hydraulic principles.

CONVERSION OF ROTARY INTO RECTILINEAR MOTION.—Mr. A. Carson, of New York, has patented a novel plan for converting any rotary motion into a reciprocating rectilinear movement. In place of the cross head attached to the piston rod, slotted or forked rods are let into grooves in the periphery of the pulley, and connected thereto by three chains, two of which connect with each rod on opposite sides, and pass in one direction round the pulley; while the third connects each rod within the slot or fork, and passes in the opposite direction round the pulley.

NEW SPECIES OF LOCOMOTION.—*Galignani* informs us that recently, on the esplanade near the church of St. Vincent de Paul, a small carriage, containing two men, was seen moving about with the utmost facility, in every direction, without the aid of horses. The motive power was air, compressed by means sufficiently economical to allow its employment in most of the cases in which steam is now used.

GOLD FROM AUSTRALIA.—According to returns which have been forwarded to us, we find that from November, 1851, until the present time, there has entered through the Custom House from the Australian colonies, 1,784,411 ozs. of gold, in addition to seven boxes, value not ascertained. This does not include amounts brought over by private individuals, or the supply by the *Marco Polo*, lately arrived at Liverpool, which was estimated at 100,000/-; this has been conveyed in 96 vessels. The largest quantity was brought by the *Eagle* from Port Phillip, which arrived here on the 29th of November, and amounted to 150,000 ozs.; the *Lady Flora*, arrived on the 22d ult., brought 77,559 ozs. The smallest amount was by the *Bolivar*, which entered the 10th of April last from Sydney, with only 50 ozs. On Thursday evening, her Majesty's ship *Plumper* arrived at Portsmouth with 20 packages of gold, valued at 50,000/-; this was transferred from the barque *Emperor*, which put into Monte Video from Port Phillip in a leaky state for repairs.

OBSERVATIONS ON CERTAIN TIN STREAM WORKS IN THE COUNTY OF CORNWALL.—No. III.

BY GEORGE HENWOOD, ESQ.

No vestige of gold, I believe, was observed here during the last workings, nor are there any traditions of its having been found there formerly, which in all probability would have been the case had any been found, for in Cornish traditions are as plentiful as in Wales, and quite as much respected; indeed, until the time of the learned Borlase, who may be styled the Thoresby of the county, there was no history of localities extant. Had gold been discovered it would certainly have left the fact of its existence in this spot, to have been handed down to futurity, together with many other similar circumstances of less striking character.

The third and last stream work to be considered this evening, is the Bog, which is situated in the parish of Ludgvan, about three miles from the town of Penzance, and one from the town of Marazion, at the head of the Mount's Bay, near a small rivulet or hill stream, called Ponsandine. The surface of this work was until lately a morass or bog (hence its name of bog) of many acres in extent, growing great quantities of gorse and reeds in summer, and in winter covered with water.

In the year 1823 the Great Wheal Darlington, an extensive copper mine, in immediate proximity, that had been abandoned many years, recommended working; this mine, by erecting immense steam-engines, drained off all the surface water, and a company of miners, chiefly working-men, attempted to explore this spot, that had hitherto been inaccessible from the quantity of water on the surface; the streams had been wrought further up the valley, but with little success, and was given up, the quantity of tin not being sufficient to warrant the outlay of capital to erect machinery for drainage. The section of the strata presented some remarkable and highly interesting phenomena, proving that here at least had been two distinct deluges, and at a vast interval of time, as proved by the extent and gradual accumulation of the deposits. I must again request your attention to section No. 3: the stratum coloured green, shows the uppermost stratum of 3½ ft. of peat and gorse roots, which formed the surface of the morass. No. 2, coloured brown, alluvial soil of the same nature as the surrounding district, about 1 ft. 6 in. thick. No. 3, coloured red, indicates pebbles and fresh water sand of comparatively recent accumulation, containing no tin or shells of any description. No. 4, coloured blue, shows a bed of sea sand, 18 ft. deep, containing sea shells of several varieties, and what is very remarkable, the nearest place at which any sand of a similar nature is to be found is in Falmouth Harbour, a distance of at least 25 miles, and at no other place on the coast; it consists of broken particles of argillaceous slate, broken shells, and corals, with a small admixture of quartz and mica, is of a light blue colour, and highly valued by the agriculturist for its fertilizing qualities; many tons are annually dredged from the bottom of the harbour for that purpose. The sand on the shore of the Mount's Bay, about 400 or 500 yards distant, is totally different in colour and composition, as are also the few shells found in the sand in the Mount's Bay; it is formed chiefly of quartz, granite, and greenstone, with a great number of pebbles and boulders intermixed, evidently from the primary rocks in the vicinity, and is not at all valued by the farmer. Under this bed of sand was found the remains of a prostrate forest, very perfect, and well-defined; the trees have been oak, holly, and the hazel: they were easily distinguished by their characteristic barks and formations, immense quantities of nuts were found; from their number they appeared to be the accumulation of many years, and not the produce of a single season, and were as perfect in appearance as if but yesterday placed there; of course, after exposure to the air they became very friable, and fell to dust on the slightest pressure; great quantities were preserved as curiosities, but to little purpose. All the heads of tops of these prostrate trees lie towards the hill, and the roots towards the sea, thus plainly indicating the catastrophe to have been brought about by that tremendous agent.

Tradition has handed down a vague account of the Mount's Bay having anciently been a wooded district, and that the islands of Scilly, now upwards of 30 miles distant joined the main land: that falling of the wood in the direction before stated, would seem to countenance that opinion, which seems further strengthened by the ancient name of St. Michael's Mount having been "Men-in-Tol" or "Hoary Rock in the Wood"; it is now surrounded by the sea of great depth, and would seem to have come so at the period indicated in nature's own unerring page, the date is lost in annals of time; but the nuts, some being appended to the boughs, seem to show autumn as the season of the year. After heavy gales, and the consequent disruption of the bark in the bay, similar trees are always discovered; the roots of the trees are plant'd in alluvial soil, 2½ ft. deep, coloured brown. Under this, at No. 5, coloured red, occurs a stratum of fresh water sand, containing a few fresh water shells, and is about 2½ feet deep; under this again are very large trees, but so decayed as only to be clasped as bog wood: from what I could see I judge them to have been gigantic oaks. The direction of the tops of these trees is directly opposite to those above, and lie towards the sea, showing the inundation to have proceeded from the hills at the time of their submersion: all the trees appeared to have been of one kind; there certainly was not that variety to be detected in the stratum previously described.

Immediately beneath, the tin seam occurs, mixed as usual with pebbles, and a great quantity of extraneous matter, requiring great care in the manipulation for its preservation, as the grains are very small, comparatively speaking. The sand was disposed in regular laminae, and appeared to have been the deposit of a long series of tides. The shells were distributed in a natural order, and not the result of an instantaneous and irregular deposit. The sand appeared to have been gradually raised in a manner similar to warp-land; it must have had a subsidence since, as it is now considerably below the level of the sea. The manner of working this mine was very simple, and similar in every respect to that of the Nancothan—viz., to remove the deeper strata, and subject the tin-bearing sand to the stream bed; the very small particles here found rendered every precaution necessary. The speculation did not turn out as well as was anticipated; indeed, the limited capital of the proprietors did not give it a fair trial. After raising a considerable quantity of tin, and continually quarrelling as to who should be captains, managers, &c., this interesting spot was neglected and abandoned. During its working it was visited by a great many scientists, men, geologists, and others. Every one was astonished at the discoveries made, particularly the sea sand, which, as I said before, is to be found nowhere but in Falmouth Harbour, and at the prostrate forest, confirming as it does so satisfactorily the ancient and vague tradition. It may also tend to give us a clearer history of this part of the country in early ages, by giving a colour to other traditions. We now arrive at the question, whence came these vast deposits of tin ore? It has long been held that the veins of tin in Cornwall have not been disturbed by the great deluge which formed the beds of tin found in the streams, the backs of the lodes presenting no indications of such an event—that is to say, no veins have been discovered bearing evidences of having been cut off as it were at the surface, leaving the course of ore bare, which must have been the case had this occurred. Again, the tin found in the veins is of a different appearance and quality to that found in stream-works—the latter being generally purer and richer, and altogether of another nature. Are they not the debris of ancient hills, and the ruins and wreck of mountains? These are the speculations of geologists, many of whom I know entertain these opinions. Many treatises have been written on this subject, but none of them have satisfactorily accounted for them. My own opinion, from close attention to the subject, is that they are the stripings of the granitic ranges still in existence, such as the Carn Brea, and other mountains of a similar character, whose tops and heights are now denuded of the argillaceous and micaceous slates (both tin and iron-bearing strata) that once covered them.

Near the Botallack Mine, in the parish of St. Just, in Penwith, on the summit of a cliff, in a ferruginous earthy stratum, are the remains of very ancient works, called tin floors, to which I have before alluded. The tin had been exhausted before the memory of man, but from the appearance of the works, it seems to have been disposed in irregular kidney-shaped masses or bunches, similar to the plumbo-geode deposit in Cumberland, and like the malachite copper bunches in the Mendip Hills; thus the miners frequently, at a day's notice, rise from a very rich and apparently inexhaustible vein to a more thread, by pursuing which he may probably again be led to another bunch. This is a very uncertain and unsatisfactory method of mining, and is but seldom followed. At Botallack, the dip or inclination of the bunches corresponds with that of the hill side on which it is situated, and owes its preservation from the general destruction to its being situated on the top of a cliff, more than 300 ft. high, and nearly perpendicular. I think there is great presumptive proof of these having been the sources, as there are frequently surface rocks or stones, called shades, found on the hill sides, having no proper habitat or locality, partaking of the nature of the floor tin I have alluded to, and of that of the stream production. I have mentioned my theory to many mine captains, who fully concur in it.

If we suppose such strata to have existed, and to have been disrupted at the time of a tremendous revolution on the earth's surface, the difficulty is solved at once; and this appears to me to be the most rational way of accounting for them, as they are always found in the valleys and ravines between mountains of this character, or in the debouches, and delta of such torrents.

I think it patent to all that the joint agencies of the volcano, the earthquake, and the deluge, have been instrumental in the accomplishment of this mighty revolution on the earth's surface, of which we have reviewed such manifest, and I trust instructive and interesting examples. I cannot take leave of this subject without advertizing to that Almighty power, whose high helst these tremendous agents obey, who the psalmist says, "Covered it as with a garment; the waters stood above the mountains. He looked on the earth and it trembled; He touched the hills, and they smoked."

Having said so much of the mines, I think I ought now to say something of the miners, who are distinguished from other classes of labourers in the county by several peculiarities; no doubt resulting in some measure from the nature of their employment—viz., a recklessness and disregard of danger, and a superstitious belief in omens, supernatural appearances—*et hoc genus omne*.

The Cornish miner has also his good qualities. He is hospitable, frank, communicative, and fond of imparting his experience to strangers. Formerly the tanners were considered, and not without reason, the most rude and uncultivated set of men in Great Britain; but by the exertions of the friends of education, and particularly by the labours of John Wesley, whose energetic discourses were admirably adapted to, and told on them with wonderful effect, great progress has been made. In later years, institutions similar to this, together with the former aids, have effected a mighty change, and may be said to have literally moved mountains; for those who were really western barbarians (as they were at that time called) have been transformed into one of the most intelligent, polite, educated, and religious communities in the kingdom. I cannot, nor ought I, here to omit my just tribute to that noble institution—the Royal Cornwall Polytechnic Society, which has afforded encouragement to the miner to display his industry and ability, their annual exhibitions at their hall in Falmouth sufficiently indicate with what effect: many most excellent and useful improvements in steam machinery, and the method of working the mines, have been suggested and introduced by working men of this class.

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After very heavy rains a voltaic or electric light, and sometimes a lambent blue flame, is seen to emanate from the earth over extensive copper and tin lodes, and repetition, particularly when the mind has a bias that way. Every headland on the coast has its sprite or phantom ship, and every cairn has its patron giant or devil. But all these supernatural personages are fast disappearing before the light of education. Their recklessness, I fear, will be a much more difficult affair to overcome. Exposed as they are to momentary destruction, from a variety of circumstances, such as premature blasts, falling from ladders, crumbling of earth work, sudden eruptions of water, and the falling of rocks, they evince a heedlessness truly unaccountable, nor can the remonstrances or threats of the captains and agents prevent or overcome the evil. They will seldom even keep the ladders in proper repair, unless absolutely compelled to do so; and I have actually seen a man sitting on a powder barrel smoking his pipe, and a candle merely stuck against the wall by a bit of damp clay, when from the quantity of loose powder strewn about, had a spark fallen, he and his companions must have been blown to atoms. Their constant exposure to danger seems to render them perfectly callous to it. I find in the coal districts the same heedlessness is prevalent. Many human individuals have exerted themselves to the utmost to prevent such egregious folly, but without success. I trust the same influences that have worked, and are working, so great and efficient a change in the county may at length reach this foolish disregard of personal safety; and I know of no more powerful auxiliary in this great and good cause than Mechanics' Institutions.

In this paper I have endeavoured to avoid all technical and mining terms, as I feel I wanted not to address a company of miners or mineralogists; I have stated nothing but what came under my immediate observation. I fear it may have been tedious and not so interesting as I had intended it to have been, but I have done to the best of my ability.

METROPOLIS WATER SUPPLY.

In these days of inquiry and rapid progress toward perfection in social, moral, and physical systems, it seems paradoxical to assert that London, the great emporium of the world, is supplied with water the quality of which is unfit for the use of man, and that notwithstanding the appointment of sanitary commissioners, and boards of health, and committees of both Houses of Parliament, before whom the most conclusive and uncontested evidence of the impure and unwholesome quality of all river and surface water supply has been given and published, the inhabitants of the metropolis are inert, and apathetic, and seem to be so prejudiced in favour of existing monopoly, that, in spite of the stinted, inadequate supply doled out to them by the companies in combination, and the dictatorial attitude so often assumed by the managing officials, they have hitherto withheld their support from those whose enterprise would relieve their thraldom, and ensure to them a constant supply of pure spring water, at a very much reduced charge. Pure water is an essential to health, and, as an article of trade, is highly remunerative to distributors, even at rates the most favourable to the consumer.

By an Analysis of the Trading Companies' Returns of the Expenses of the existing Supply of Water to the Metropolis, and Schedule of Prices, by W. Ranger, Esq., prepared by order of the House of Lords, dated the 22d of June, 1852, it appears there are nine companies at present supplying 285,239 houses, with 16,755,430,362 gallons of water annually, equal to a daily average supply of 151,13 gallons per house. The gross rental received by these nine companies from the inhabitants of the metropolis and its suburbs is £431,898.0s. 0d.; nearly 1/10. 0d. per house; against 176,511,55. 8d. for gross working expenses, nearly 40/- per cent., or about 12s. 6d. per house; the difference between the average price charged each house and the working expenses being about 18s. per house. So that, under this aspect, the question of water supply assumes no mean appearance in a commercial point of view. Wherever human beings are thickly populated water will always command a remunerating price; but seeing it is a natural product, requiring neither skill nor labour, replenished continually by copious showers falling from the clouds in the form of rain, and that the works constructed to supply 100,000 houses can, at a comparative small outlay upon the original cost, be made applicable to the supply of double that number, the rate of charge to each consumer, in that case, ought to be very much reduced, insomuch as the additional outlay for the extension of pipeage necessary to such increased supply cannot bear a relative proportion to the increased income that would be received upon the gross amount of capital employed. The interest on capital used in the distribution of an article from Nature's storehouse, like water, should be limited to a maximum rate per cent., because the cost of that distribution bears no relative proportion to the abundance of the article so distributed; thus, as regards water, an increased supply can be given with equal profit at a decreased charge. Those companies which have kept up, and perhaps increased their rates upon an increased demand, have not only been enabled to extend their works, without the aid of new capital, but have also paid an exorbitant per centage to their proprietors out of their revenue, to the cost and manifest injustice of the public. Such a mode of dealing with one of Nature's elements is unusual and highly reprehensible.

The idea which induced the far-seeing Sir Hugh Myddleton to risk his fortune in an undertaking of such magnitude as his project for supplying London with water involved, was better conceived than appreciated by the men of his day, many, no doubt, condemning him as a visionary; but the result of his project has proved, at least in a pecuniary point of view, the correctness of the judgment of that one individual, as opposed to the fallacious reasoning of the multitude. He foresaw the natural and inevitable increase of the population; and with it the extension of the town, its shipping, its commerce, and trade; and though, to many, the day was far distant—if it ever arrived—when the streams of the majestic Thames would become polluted with the refuse and waste of numberless human beings, he could realize the time when its course must become the common sewer, and its waters would be no longer applicable to the domestic purposes and requirements of the inhabitants of this great town. The source he fixed upon from which to obtain a pure supply was in the neighbourhood of the extensive chalk districts of Hertfordshire, which, as a pure source, still appears to be the only one capable of supplying in quantity and quality the requirements of the million residing on the northern side of this vast metropolis; but the mode by which that supply was, and still is, conveyed—namely, an open aqueduct, receiving in its course the drainage of thousands of acres of highly manured lands and the admixture of other waters necessarily pumped up from the neighbouring rivers and streams to meet the increased demands of the community, the chemical character of the original source is wholly changed, and organic matters of such an event—that is to say, no veins have been discovered bearing evidences of having been cut off as it were at the surface, leaving the course of ore bare, which must have been the case had this occurred. Again, the tin found in the veins is of a different appearance and quality to that found in stream-works—the latter being generally purer and richer, and altogether of another nature. Are they not the debris of ancient hills, and the ruins and wreck of mountains? These are the speculations of geologists, many of whom I know entertain these opinions. Many treatises have been written on this subject, but none of them have satisfactorily accounted for them. My own opinion, from close attention to the subject, is that they are the stripings of the granitic ranges still in existence, such as the Carn Brea, and other mountains of a similar character, whose tops and heights are now denuded of the argillaceous and micaceous slates (both tin and iron-bearing strata) that once covered them.

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water is seldom met with that does not contain the elements out of which plants and animals are formed;" and the same writer, alluding to the microscopic examination of the chalk water, after having been submitted to Dr. Clark's softening process, says, "in specimens collected with care, (that is, not from the open spring, which might be impregnated with organic matter,) and especially when softened, the Watford spring water was found as free from organic matter as distilled water itself." Dr. Redfern also states, in reference to this Watford water, "I believe it to be as free from organic matter as any water can be in its natural state, and possesses every quality that is desirable in a water for the domestic uses of the population of a large metropolis." The water from these springs has also been pronounced by Professors Graham, Miller, and Hofman, the eminent chemists who were appointed by the Government to consider the chemical quality of the water supply to the metropolis, to be a water "containing absolutely nothing of organic origin capable of further alteration or decomposition, and is, therefore, wholly unobjectionable on the ground of organic constituents," and that "in their judgment this water is entitled, from its chemical quality, to a preference over all others for the future supply of the metropolis." It appears to approach most closely to the standard of all that is excellent in a town supply, and is worthy of the greatest efforts and greatest works to procure and convey it. But the sources are near at hand, and the water is attainable without difficulty or great expense. With such a noble application of the chalk spring-water in view, as the supply of the metropolis, it would be a desecration to permit that water to be wasted on other uses." It is our deliberate opinion, which we enforce in the strongest terms, that the much-desired and most necessary improvement in the quality of the London water, is associated with these sources of supply, and will depend upon their proper application to the uses of the public."—(See Report to the Right Hon. Sir George Grey, Bart., dated 17 June, 1851.) Such is the character of the water proposed to be supplied to the northern side of London by the Watford Company from the neighbourhood of Bushey Meadow; and such is being raised from the chalk basins in various parts of the country, and now about Plumstead, by a company which is formed, and in operation, under the Registration Act, to supply with pure water, Woolwich, Deptford, Greenwich, Charlton, &c.

The Watford water can be abundantly obtained at a natural elevation of more than 130 feet above Trinity high water-mark, as stated in the prospectus, and after being softened by Professor Clark's process, is to be pumped up into reservoirs on Stanmore Common, at an altitude sufficient to cause it to rise to the upper stories of the highest houses in the most elevated parts of the metropolis, suburban places, and intervening districts between that and its source.—Dr. Clark, speaking of this process, calls it "the lime-softening process." For this purpose part of the water was converted into lime-water by the addition of slack lime; two measures of this water mixed with nineteen measures of the water itself. The two clear waters became perfectly white, from deposited chalk, like a weak whitewash; but within six hours the mixture seemed to clear very well. Tried at the end of twenty-four hours, the hardness was only 3½ instead of

THE SCREW PROPELLER.

A very valuable work by Mr. John Bourne, C.E., has just been published by Messrs. Langman and Co., being a *Treatise on the Screw Propeller, with various Suggestions for Improvement*, and of a size to render it a companion to the *Steam-Engine*, by the same author, noticed in the *Mining Journal* of Jan. 13, 1849. The object of the work, as we are informed in the preface, has been to collect the most material facts connected with the operation of the screw propeller, so as to bring the reader up to the highest point of information yet reached upon the subject. Further, having perceived that screw-vessels, as heretofore constructed, have had weighty and invariable defects, the author has devised expedients for their remedy, which suggestions will, we have no doubt, receive that attentive consideration which they evidently merit. Among these imperfections, perhaps the most formidable is their inability to contend against head winds, without involving a most wasteful expenditure of coal; and this has unfitted them for carrying the mails between distant countries with advantage, or for performing any similar service, where head winds have to be encountered for any length of time. Some principles are recommended on which it is thought the evil will be completely remedied, and that such vessels would be able to proceed against a head wind of such strength, that a paddle-vessel of equal power would not be able to stem it at all. Whether these views turn out correct, great advantages will undoubtedly have been obtained by the author's investigations. It strikes us as somewhat extraordinary that ships, with the accumulation of skill of a thousand generations, should continue to be constructed in so unscientific a manner as they have been; and the author shows that, as a ship is the weakest in the direction of her length, and liable to bend or break in the middle, it should be regarded as a hollow beam, of which the deck is the upper, and the bottom the lower edges, and strengthened in the top and bottom, which have to bear the strain. Instead of the various kinds of straps, trusses, and other palliatives hitherto in use. In the historical account of the screw propeller, it is supposed to be undoubtedly of very ancient origin, and is said to have been in use in China for ages, but in Europe is a much more modern contrivance. It is a modification of the windmill or smoke-jack, and the idea of making a screw on this plan to work in water appears to have originated with Robert Hooke, an ingenious member of the Royal Society, about 1660 to 1670, who was one of the most extraordinary men this country ever produced as an adept in general science. He was born in 1635, and died in 1702-3. Although some machines, somewhat approaching to the screw propeller, were invented by Leopold 1724, Du Quet 1731, Emerson 1754, and others, it appears that the first patentee which really adopted the screw was Joseph Bramah, in 1785; this was a kind of paddle-wheel projecting from the stern, the vanes or floats being placed at an angle, giving it the powers of the screw. He was followed by W. Lyttleton, in 1762, Woodcock 1832, Smith 1836, Ericsson 1836, Lowe 1838, J. O. Taylor 1838, P. Taylor 1838, Haddan 1839, Rennie 1839, Hunt 1839, Capt. Carpenter 1840 and 1851; between 1840 and the present time about 70 patents have been obtained for various modifications of the screw propeller in England alone, besides many others in other European States and America; many of them reproductions of former inventions, with important modifications. Smith and Ericsson, at the time of taking out their patents in 1836, caused more attention to be paid to the subject than at any previous period, and both were eminently successful. Mr. Francis Pettit Smith was a farmer at Hendon, and patented in May, 1836, a screw propeller; having obtained the assistance of Mr. Wright, the banker, a model boat was constructed fitted with the screw, and exhibited at the Adelaide Gallery. The results were so satisfactory, that a vessel six tons burden was fitted up, and placed in operation on the Paddington Canal, in February, 1837. During one of these trips half the length of the propeller was broken in before; from this discovery a new screw of a single turn was fitted, and the most satisfactory results ensued. In this miniature vessel the patentee went to sea in most favourable weather, and fully tested the capabilities of the screw.

Subsequently, as the attention of the Admiralty was called to the subject, the *Armedes* was built, of 237 tons, at a cost to Mr. Smith and those friends who had assisted themselves with him, of 10,500*l.*, and after many trials on the Thames, succeeded to sea on 15th May, 1839. She made the voyage from Gravesend to Portsmouth in 20 hours, and in a match beat the *Vulcan*, one of the swiftest vessels in the service. She was then placed at the disposal of Capt. Chappell, who with Mr. Smith circumnavigated Great Britain, calling at every port of any consequence, Oxford shipowners, engineers, and others, the opportunity of becoming acquainted with this novel mode of navigation. She afterwards went to Oporto, making the shortest voyage then on record.

The first vessel tried with Ericsson's screw propeller was the *Francis B. Ogden*, which attained a speed of 10 miles an hour, and towed a schooner of 140 tons at seven miles an hour. To engineers it is, therefore, known that Smith, or at all events, him and Ericsson, established the art of screw propulsion, while other patentees have lain until the battle was fought, and then came forward to claim the victory; and courts of law, puzzled by questions they did not understand, have permitted claims which ought in justice to have been at once disallowed. We ought not omit to state that great credit is due to Mr. Wright, the banker, but for whose pecuniary aid Smith's patent would, probably, never have been taken out; also to Messrs. Rennie, who were among the first to augur favourably of the issue of the project, and had a large interest in it; and to those gentlemen forming the "Screw Propeller Company," who have hitherto had no return in the shape of profit for the large sums invested.

At this point we have got through two chapters of the work, the most interesting, though not the most important. The third treats on the scientific principles concerned in the operations of screw vessels, and in all there are twelve chapters—on the comparative efficacy of the screw and paddle, merits of different kinds of screws, screw vessels of full power, of auxiliary power, and on canals, different kinds of screw engines, details of their construction, screw and paddles combined, and a recapitulation of doctrines and conclusions, with an ample appendix, containing much useful and important information. On the comparative advantages of screw and paddle vessels, it is assumed that in smooth water, and both vessels in their best trim, they are about equal efficiency, the advantage, perhaps, laying rather with the paddle, although not of practical account. In deep immersions, however, screw vessels have a decided advantage, while in head winds paddles are the best. Screw vessels encountering strong winds are most wasteful of power, but the author remedies this by sinking the screw deeper in the water, and placing it further forward in the dead wood. Screw vessels, as they will hereafter be constructed, will, in the author's opinion, be found preferable to paddles under all circumstances, and that the latter must be abandoned for ocean navigation. The volume is exceedingly well arranged and got up. There are 20 beautifully engraved illustrations of the machinery of various screw vessels, a large number of wood-cuts; and to the engineer, ship-builder, and man of science, will prove a valuable source of reference.

ON THE PREPARATION OF LIQUID GLUE.—All chemists are aware, that when a solution of glue (gelatin) is heated and cooled several times in contact with the air, it loses the property of forming a jelly. M. Gmelin observed that a solution of gelatine, enclosed in a sealed glass tube and kept in a state of ebullition on the water-bath for several days, presented the same phenomenon—that is to say, the glue remained fluid, and did not form a jelly. The change thus produced is one of the most difficult of solution in organic chemistry. It may be supposed, however, that in the alteration which the glue undergoes, the oxygen of the air or of the water plays a principal part; what leads us to think this, is the effect produced upon glue by a small quantity of nitric acid. It is well known, that by treating gelatine with an excess of this acid, it is converted by heat into malle and oxalic acids, fatty matter, tannin, &c. But it is not thus when this glue is treated with its weight of water and with a small quantity of nitric acid; by this means a glue is obtained which preserves nearly all its primitive qualities, but which has no longer the power of forming a jelly. Upon this process, which I communicated, is founded the Parisian manufacture of the glue which is sold in France under the title of "*colle liquide et inalterable*." This glue being very convenient to cabinet-makers, joiners, pastebone-workers, toy-makers, and others, as it is applied cold, I think it my duty, in order to increase its manufacture, to publish the process:—It consists in taking 1 kilog. of glue, and dissolving it in 1 litre of water in a glazed pot over a gentle fire, or, what is better, in the water-bath, stirring it from time to time. When all the glue is melted, 200 grms. of nitric acid (spec. grav. 1.32) are to be poured in, in small quantities at a time. This addition produces an effervescence, owing to the disengagement of hydronous acid. When all the acid is added, the vessel is to be taken from the fire, and left to cool. I have kept the glue, thus prepared, in an open vessel during more than two years, without its undergoing any change. It is very convenient in chemical operations; I use it with advantage in my laboratory for the preservation of various gases, by covering strips of linen with it.—M. S. DEMOULIN: *Comptes Rendus*, Sept. 27.

PURIFICATION OF NAPHTHA AND PREPARATION OF NAPHTHALINE.—Mr. Whitesmith (Glasgow), suggests the following method of purifying coal-naphtha, so as to fit it for preserving potassium:—Take a considerable quantity of the best rectified coal-naphtha, and add about 10 per cent. of concentrated sulphuric acid. Keep them in contact, with frequent agitation, for three or four days. Decant the naphtha, which is now of a deep red colour, with an acid reaction, and most pungent odour, is distilled very gradually, and re-distilled by a current of dry ammonical gas passed through it. It is then repeatedly distilled, rejecting the last portions. Thus, it finally appears as an exceedingly mobile, limpid fluid, of a pleasant odour, and is perfectly adapted for preserving potassium. To obtain naphthaline, mix common bituminous coal in fine powder with an equal quantity of quick-lime, put the mixture in a small tin-plate still, and heat over the gas furnace for about an hour. On afterwards opening the still, naphthaline will be found deposited inside the head.—*Artisan*.

MANUFACTURE OF GAS FROM WOOD.—Two years ago, Dr. Pettenkofer showed by experiment, at a meeting of the Polytechnic Institute of Bavaria, that a very considerable amount of illuminating gas could be disengaged from 2 ozs. of wood. The inventor's process is now in operation at Basle, and is also about to be introduced at Zurich, Stockholm, and Drontheim. The process is said to be far less expensive than the manufacture from fossil coal, and furnishes a gas which is free from sulphured hydrogen, and several useful collateral products, as charcoal, wood-tar, and wood-vinegar.—*Central Blatt*.

CURIOSITIES OF GEOLOGY.—It is known as a fact in geology, that below the depth of 30 feet the earth becomes regularly warmer as we descend. On an average, the increase is at the rate of 1° Fahr. for every fifth foot. At the bottom of the mines of Cornwall—a depth of 1200 feet—the thermometer stands at 88° equal to high summer heat. At this rate, rocks and metals would be melted 20 miles below the surface; and down in the bowels of the earth, several hundred miles, the heat would be ten thousand times hotter than melted iron. Who is there that can wonder at earthquakes, when all things rest on a molten sea of fire!—*Literary Journal*.

ENORMOUS SHEET OF PAPER.—At Airthrey Mills, Stirlingshire, a sheet of web or white paper has been manufactured, without a break, being one continuous sheet, 3000 yards in length—within a little of 1½ miles—24 inches broad, and weighs 400 lbs. This web was made, dried, and finished ready to be dispatched within 3 hours.

THE WEIGHT THAT CAN BE TRUSTED ON A PILE.—Let us take a practical case, in which the ram weighs 1 ton and falls 6 ft., and in which the pile is sunk half an inch by the last blow; then as half an inch is contained 144 times in 72 inches, the height the ram falls, if we divide 144 by 5, the quotient obtained, 18, gives the number of tons which may be built with perfect safety, in the form of a wall, upon such a pile.—*Builder*.

HOLLOWAY'S OINTMENT AND PILLS ARE SURPRISING REMEDIES FOR THE CURE OF BAD LEGS.—Mrs. Aiken, a stewardess of steam-vessels, residing in William-street, Great Howard-street, Liverpool, was afflicted for years with a dreadful bad leg, in which were several deeply seated ulcers, that defied the skill of many eminent surgeons to cure. At last she was obliged to resign her situation and go into the Liverpool Infirmary, where she remained five weeks without improvement. She left the institution, and as a last resource commenced using Holloway's Ointment and Pill, and these valuable medicines speedily effected a sound and perfect cure of her leg, and restored her to health and strength.—Sold by all druggists, and at Professor Holloway's Establishment, 244, Strand, London.

ON THE GEOLOGY OF SOUTHERN AFRICA.

BY A. G. BAIN, ESQ.

[Read at the Geological Society.—W. HOPKINS, Esq., President, in the chair.]

This memoir was illustrated by a finely executed geological map of the country south of the Orange River, several geological sections of the same district, and a fine suite of rocks and fossils, this collection being supplementary to a still more extensive series previously sent. The following abstract does not by any means give in full all the results of Mr. Bain's long-continued and arduous investigations in the arid and often dangerous districts in which he has spent so great a portion of his life, nor is special reference here made to the writers whom Mr. Bain mentions as having previously described some of the geological phenomena of the Cape, or to the communication from Mr. Bain himself, already published in the *Geological Society's Transactions* for 1845, but a general view is here offered of the most interesting and important facts connected with the geological structure of the southern extremity of the African continent. The granite of Table Mountain and its vicinity, and of George District, is the lowest and fundamental rock, but the supercumbent gneiss and clay-slate are of older date, as is seen by the fact of their having been locally melted, disturbed, and penetrated by the granitic rock below them. The granite does not appear as a continuous band along the coast, but only protrudes as local patches, nevertheless it may be considered both as the lowest and the most southern of the several rocks forming this region. It appears also in Natal. The next great rock formation consists of the gneiss and clay-slate above alluded to. The clay-slate is very extensively developed, and is of great thickness; it occupies the southern and western sea-board, and the districts west of Oliphant's Bergen and Hottentot's Holland, and the districts south of Lange Bergen. At Cape Town it is a bluish black rock, worked for building purposes; at other places it passes into mica-slate and gneiss, and sometimes it is decomposed into a soft variegated clay: it is much traversed by quartz veins. The beds have always a high angle, and are often vertical, contorted, or even overturned. Lying unconformably on the clay-slate and the granite are beds of sandstone and conglomerate. These cap the Lion's Head, and constitute the mass of the Peninsula down to Cape Point, occur as patches in the district north of Cape Town, and south of the Zonder End River, and form the ranges from Oliphant's Bergen to Hottentot's Holland, and from Winterhoek's Berg to Lange Bergen and Kromme Heights. In the most northerly of these ranges the beds dip to the north, and are overlaid by a series of fossiliferous rocks, which extend as a band, about 30 miles wide, from Hantam River on the north-west, to the Coega Mountains on the east. The fossils of these rocks consist of trilobites, spirifers, gastropods, and other molluscs, which have a decided "Devonian" character. At the eastern extremity of this band an extensive district of undulating sandstone beds occurs between the Gamtoos and Great Fish Rivers. These beds may possibly be of the "carboiferous" age. Both the carboniferous and Devonian rocks are succeeded on the north by a narrow band of blue clay-stone porphyry, which extends across the colony, a distance of 600 miles, from the Hantam River on the north-west, to the Great Fish River on the east, parallel with the above described bands of rock, and, like them, keeping a general parallelism with the sea-coast. The porphyry dips to the north throughout. In Albany there are also long narrow patches of the porphyry, south of the great band, lying on the undulating sandstones (near Graham's Town), and still further south (north of Enon) a thin parallel band dips south, and is overlaid by a bed of conglomerate, and that again by fossiliferous beds.

These last are well seen near the mouths of Sunday, Zwartkops, and Gamtoos Rivers, and contain abundance of fossils (trigonia, exogyra, astrea, anopliora, gervillia, eucerasia, ammonites, nautili, &c.), together with ferns, zamias, and other plants, and remains of large reptiles), and are considered to be of the "lower cretaceous" age. These beds again occur to the north, near the mouth of St. John's River. The Tertiary strata of the great porphyry band, and throughout its whole extent, Mr. Bain has discovered an extensive series of deposits, which are rich in remains of plants and reptiles. The former occur particularly at Ecca Heights on the east, and at the Patties River on the west. The reptile remains chiefly occur between 32° and 33° latitude, and in the Sneeubergen particularly, and consist of a remarkable group of peculiar forms, of which the Diycodon is the only one yet described. Near Graaf Reinet fish remains, and a few fossil shells, have been found in these deposits. This extensive series of stratified deposits, occupying the Great Karoo Desert and the regions to the north and east of it, may probably prove, when its fossils have been more fully studied, to have been the result of a great inland body of water, possibly almost entirely fresh water. Still further to the north-east, immediately west of the Drakenberg, is a wide tract, occupied by a superior member of this great "Karoo series," and containing similar reptilian remains, fossil trees, and thin beds of coal. The whole of the region occupied by these "Karoo" beds is traversed in every direction by numerous vertical dykes of greenstone—the largest of which pierces the Spitzkop, and forms its summit at a height of 10,000 feet above the sea. The erupted matter of these dykes, on reaching the surface, has formed horizontal beds, rudely prismatic, and capping all the high lands and mountains. The strata are indurated and altered in the vicinity of these dykes; but are not disturbed. Besides the above-mentioned series of strata, there remain to be briefly noticed the extensive deposits of calcareous tufts both on the coast and in the interior; local patches of white sandstone, lying unconformably on the clay-slate near Wyndberg and at Zwellington, containing silicified casts of algae and plants and upright parallel stem-like bodies; the superficial clays and seams of lignite near Tigerberg, especially noticed by Sir J. Barrow; the superficial ferruginous deposits on the Cape flats, sometimes attaining a thickness of 10 ft., and used for road material; and that of the Koega springs, near Port Elizabeth; and, lastly, the masses of shell breccia found at various heights along the coast, and often occupying the floors of caverns, which have probably been brought thither by the aborigines.

VENTILATION OF MINES—THE STEAM-JET.

At a meeting of the members of the Northern Coal Mining Institute, held at the Literary and Philosophical Society, Newcastle—NICHOLAS WOOD, Esq., in the chair—was a numerous meeting of colliers and viewers: four Government Inspectors were also present—Messrs. Matthias Dunn, Newcastle; Joseph Dickinson, Manchester; Thomas Wynne, Staffordshire; and Herbert Macworth, South Wales. Mr. Dunn was already a member of the Institution, and on the motion of the chairman, the other gentlemen were unanimously elected honorary members; with also Mr. William Lancaster and Mr. Charles Morton, Government Inspectors. Several ordinary members were likewise elected.

Mr. E. SINCLAIR (secretary) having read the minutes,

Mr. WILLIAM ARMSTRONG, of Wingate Grange, read a paper on the ventilation of coal-mines by the furnace and steam-jet, and minutely detailed the nature and results of experiments which he had performed, closing his report with the following conclusions:—

- In shafts of all depths, the consumption of an equal weight of coal will produce a higher ventilating current from the furnace than the jet.
- The difference in favour of the furnace, when the jet is placed at the bottom of the shaft, will be increased as the depth, but in higher ratio—the large column adding to the exhausting power of the furnace and diminishing that of the jet.
- In the production of equal currents of air, the furnace is the more economical agency of two.

It is probable that in all shafts, where the temperature is sufficiently high to preserve the steam from condensation, a large mechanical effect—larger volume of air—will be obtained when the furnace is assisted by the jet; the consumption of coal, however, being largely increased.

Except in conjunction with the furnace, the jet, whether placed at the bottom or top of the shaft, is from the liability to sudden stoppage and irregularity of motion, incident to all machines, unfitted to the very important function of ventilating our top-shafts.

THE CHAIRMAN also read a paper on the same subject, comprising a report on the experiments made at Hetton and Killingworth in presence of the Government Inspectors. He first disposed of the "furnace limits," so called; but, he said, improperly so called—the limit having no more to do with the furnace than the jet; a current of air, however produced, being exposed to a resistance proportioned to its velocity. The general result of the Hetton experiments was highly favourable to the furnace in comparison with the jet. Even as an auxiliary the jet appeared to be of little service, and at high velocities hardly any. At Hetton, the jet was applied at the bottom of the shaft: it was tried at Killingworth at the top, with three large boilers on the surface. He was surprised to find, with so large an evaporation of water, that the effects were so comparatively trifling—not greater than what were obtained from one small 7-foot furnace. Other two experiments gave—

	Cubic feet.
Jet	19,816
	21,247
Furnace	30,712
	30,857
Jet and furnace	34,806

These results were obtained in deep mines. In a comparatively shallower shaft, Mr. Greenwell got 6000 cubic feet by the jet, and 7200 and 8000 by the furnace, the jet consuming more coal.

The elaborate papers of Mr. Armstrong and Mr. Wood will doubtless be printed.

MR. DICKINSON observed, that he thought Mr. Darlington would hardly be satisfied unless the jet were tried at Killingworth as well as at Hetton with the cylinder tubes. At Ince Hall, these results had been obtained—

	Cubic feet.
Jet	37,350
	36,030
Furnace	36,930
	37,399

At another pit, however, the results were different:—

Boiler fires.	26,416
Jet and boiler fires	33,331
	33,122
Furnace and boiler fires	46,354
Jet, furnace, and boiler fires	44,805

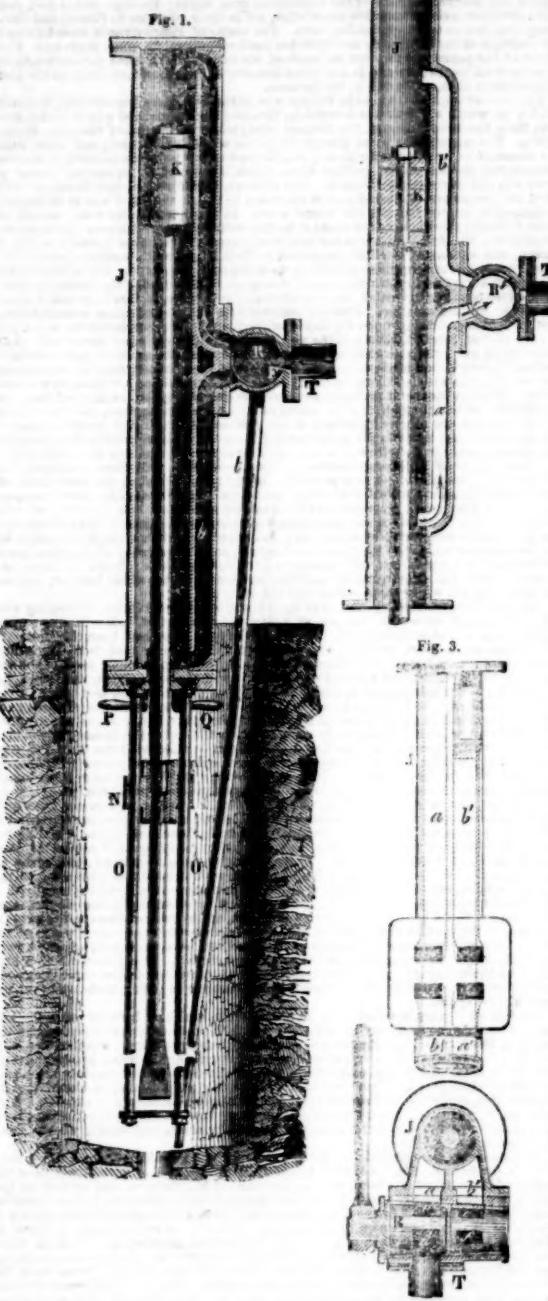
Mr. Dickinson explained that, through some peculiarity in the arrangements, the jet, in the latter experiment, seemed to take the wind out of the sails of the furnace.

THE CHAIRMAN said, as we understood him, that the jet had been tried at Killingworth with and without cylinders, and with the same results. His desire was to try the experiment in any way that the Government Inspectors thought proper, so as to elicit the truth.

MR. MACKWORTH observed, that the jet was tried at a colliery near Swanson in 1828, and we understood him to say, without advantage. To Mr. Wood the coal trade and the public were deeply indebted for his careful and elaborate experiments.

STEAM BORING-MACHINE FOR MINES, QUARRIES, &c.,
BY M. CAVE, ENGINEER, PARIS.

Fig. 2.



The reputation of M. Cavé as an engineer is well known, and he has lately turned his attention to the subject of boring, for mining and similar purposes, by steam or other power. Those of our readers who are practically acquainted with mining operations are well aware of the important benefits which a good mechanical system, as a substitute for manual labour, would confer both on the working miner and the ad-venturer. In hard ground, the expense of sinking a shaft or driving a level is almost incredible. The presence of impure air, the confined space, and the want of light, all combine to limit the efficiency of the miner, whilst the impossibility of more than three or four men working at one end prevents the work being pushed forward with any greater rapidity, however important the object to be gained may be, and however little the cost may be of consequence. In metal mines, the cost of extraction does not bear so large a proportion to the value of the material raised as it does in coal mines; and attempts have been made in the latter to use circular revolving cutters, so as to bring out the coal in rectangular masses, which would increase its value in point of stowage, and also, we are inclined to think, preserve its evaporating powers. There is a very manifest deterioration in the quality of coal when it has been broken up and exposed to atmospheric influences, which immediately occurs to a person visiting a coal district, and witnessing for the first time the rapidity and brilliancy with which the fresh raised coal inflames.

For the great majority of mining, quarrying, and tunnelling operations, boring and blasting is employed; and it is for this object that M. Cavé's machinery is designed. It consists of a cylinder and piston, actuated by steam, compressed air, or by the vacuum system, the cutting tools being attached to the piston-rod, and acting by per-cussion. It thus resembles a Nasmyth's steam-hammer; and a similar means is employed to destroy the momentum of the piston, by enclosing a portion of steam or air, which acts as a cushion at each end of the cylinder. To carry out this purpose, the inlet and exhaust passages are kept quite distinct, as will be seen on reference.

Fig. 1 is an elevation of the machine in section through the inlet passages; Fig. 2 is an elevation of the cylinder in section through the outlet passages; Fig. 3 is a front elevation, showing the passages; and Fig. 4 is a plan in section through the passages. J is the cylinder, containing the piston, K, to the rod of which is attached a cross-head, N, to which is also fixed the chisel, M. The cross-head and chisel are guided by the guide-rods, O, O, which are fixed in a plate dovetailed into the cylinder cover, in such a manner that it can be freely turned round (with the piston) by means of the handles, P, Q, and thus enable the chisel to take a fresh cut at every stroke, without which it would jam. The annexed sketches show the shape of the chisel and its cutting edge. The admission and emission of the compressed air or steam is regulated by a four-way cock, R, supplied by a pipe, T, as shown in Fig. 1. The air is admitted through the inlet passage, a, on the top of the piston, which will rapidly descend, until it passes the outlet, a' (Fig. 2), when, the further escape of air being prevented, the piston is stopped by the air-cushion.

It will be observed that the plug of the cock is divided transversely by a diaphragm, shown in Fig. 4, to keep the passages distinct, c and d answering to the two inlet passages, e and f to the two outlets. The air which escapes from the cylinder is led by the pipe, t, to near the point of the chisel, and will have the effect of blowing away the small chips loosened by it.

The machine is shown in the engraving as working vertically; but it could obviously be applied to driving a level, by placing it horizontally, and mounting it on a carriage. If it be desired to bore a hole of larger diameter than the width of a chisel, the cutter can be fixed at any desired distance from the centre of the piston rod, the revolution of which will cause the cutter to describe a circle of corresponding diameter. For sinking shafts, a number of cylinders might be employed simultaneously, working a sufficient number of chisels to extend round the shaft; and the same arrangement applied horizontally would serve to drive a level. In vertical boring, the chisels have to be regularly withdrawn, in order to permit of the extraction of the debris; but we do not find that the inventor has provided any special means for effecting this object. He has suggested that electro-magnetic power may be applied to work this machinery; but air appears to offer the most tangible advantages. It can be conducted a great distance without suffering condensation, as steam does; and it would materially improve the atmosphere of the mine, by blowing in fresh air, or, if worked on the vacuum system, it would be equally advantageous in coal mines, by serving to draw off the fire-damp. Although M. Cavé has patented this arrangement, we are not aware if it has been practically applied. We foresee some difficulties, but we apprehend they are not beyond the ingenuity of our Cornish miners to overcome.

(We are indebted to the Editor of the *Artisan* for this paper, and the accompanying illustrations.)

IMPROVED STONE SAW.—Mr. A. Eames, of Springfield, Massachusetts, has obtained a patent for a saw on a novel principle for cutting stone. The middle portion of the blade is formed of a slab of lead, or other soft metal, into which a quantity of the sand used becomes embedded, forming a rubber to wear the sides smooth; while the edge being made of steel, or iron, continues cutting, and keeps the kerf at the requisite width.

NEW IRON-WORKS.—On the 22d inst. the foundation of three blast-furnaces was laid about half a mile below Middlebrough Dock. They are the property of Messrs. Gilkes, Wilson, and Co.; and it is anticipated that several more furnaces will be required shortly. Mr. Thomas James, of Merthyr Tydfil, Glamorgeshire, will superintend the construction of these works.—*Sunderland Herald.*

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OFFICES OF THE COMPANY.—AT THE WORKS, NEAR KILMARNOCK, SCOTLAND; AND 17, GRESHAM STREET, LONDON.

The Portland Iron-works are situated within two miles of the town of Kilmarnock, and within 12 miles of the shipping port of Troon, to which there is a railway direct from the works.

The plant consists of blowing engines, three blast-furnaces, foundation for a fourth, boilers, engine-houses, clay-mill, brick-kilns, 11 other engines, boilers, pumps, and apparatus, work-shops, four miles of railway, and rails complete, and one mile of extra rails, with furnace bank, and several hundred tons of plate-iron thereon, besides nearly 100 houses and flats.

The Ironstone Fields consist of about 500 acres, nearly 2000 of which contain the celebrated Black Band Ironstone, varying from 14 to 24 inches in thickness, and of the first-rate quality. The remaining 3000 acres contain a large quantity of coal and ironstone, and no doubt, the Black Band also.

The coalfield consists of 700 acres, and contains an inexhaustible supply of coals, having three seams of the first class, of upwards of 20 feet in thickness, besides an immense supply of fire-clay.

Four blast-furnaces will be in full work in a few months, being fully sufficient to produce 30,000 tons of pig-iron in the year, which, at the present price of iron, would realise a net profit of 20s. per ton, or £30,000 per annum; 3s. 4d. per ton profit being equal to £5000 per annum, sufficient for a dividend of 3 per cent.; and there is no doubt one or two very handsome dividends will be paid next year, with regular dividends afterwards.

The class of iron hitherto made at these works has always commanded the highest price, and they will have the extraordinary advantage of a coal-pit within a few yards of the furnaces, thus avoiding the great loss often arising from the inability to get coals; besides which a superior bed of fire-clay is worked on the estate.

There has been nearly £100,000 laid out upon the works. Nevertheless, the Board of Management will, with the proposed capital, be able to purchase the entire property, erect four additional blast furnaces, and put the works into perfect order.

The extraordinary demand for iron for America, India, and other foreign parts, must, of necessity, keep up its price for years to come.

12,500 shares have already been subscribed for; and as the proprietors take 12,500 more in part of their purchase money, only 25,000 remain to be allotted to the public.

Prospectuses, with full particulars, can be had of the broker, A. L. Bellinger, Esq.; or of the secretary, at the company's office, London, to either of whom applications for shares must be made according to the form below.

FORM OF APPLICATION FOR SHARES.

Portland Iron Company.—To the Board of Management of the above Company.

GENTLEMEN.—I request you will insert my name as a subscriber for _____ parts, or shares, in the above company; and I hereby undertake to accept the same upon the rules and regulations to be entered in the Cost-book of the said Company, and to pay the sum of £2 on each share when required by your letter of allotment.

Your obedient servant,
Name in full
Description
Residence

Referee and address.....

LONDON (WATFORD) SPRING WATER COMPANY.

TO BE INCORPORATED BY ACT OF PARLIAMENT.
Which will limit the liability of the shareholders, and in respect of which the plans, sections, and books of reference, have been duly deposited, in compliance with the Standing Orders of Parliament.

[Provisionally registered under the Act 7 and 8 Victoria, cap. 110.]

Capital £400,000, in 16,000 shares of £25 each.

Of which £1 7s. 6d. per share will be payable on signing the Parliamentary Contract, and no further call will be made until the Act has been obtained.

AUDITORS.

HENRY THOMAS HOPE, Esq., 116, Piccadilly; and Deepdene, Dorking, Surrey.

COL. MICHAEL EDWARD BAGNOLD, 28, Hanlton-terrace, St. John's-w. wood.

GEORGE HINTON BOVILL, Esq., 19, Abchurch-lane; and Wimbleton, Surrey.

THOMAS DAKIN, Esq., 23, Abchurch-lane; and Hornsey.

WALPOLE EYRE, Esq., 22, Bryanston-square.

JAMES LAWRIE, Esq., Cousin-lane, Upper Thames-street; and Cambrian Villa, Hackney.

THOMAS HAYTER LONGDEN, Esq., Tokenhouse-yard; and Ennismore-place, Prince's Gate, Hyde Park.

BENJAMIN OLIVIERA, Esq., M.P., 8, Upper Hyde Park-street.

JAMES PONSFORD, Esq., 21, Palace Gardens, Kensington; and Hackwood Park, Hants.

SIR ROBERT PRICE, Bart., M.P., 11, Stratton-street, Piccadilly; and Foxley, Herefordshire.

WILLIAM R. ROBINSON, Esq., 21, Austinfriars; and Hill House, Acton.

JAMES WARREN, Esq., 36, Houndsditch; and Cape House, Eadefield.

(With power to add to their number.)

ENGINEER.—Samuel Collett Hornerham, Esq., 19, Buckingham-street, Adelphi.

SOLICITORS.—Messrs. Matby, Robinson, and Jackson, 7, Bank-buildings, Lombardy-street.

PARLIAMENTARY AGENTS.

Messrs. Law, Holmes, Anton, and Turnbull, 18, Finsbury-street, Westminster.

BANKERS.

Sir Samuel Scott, Bart., & Co., 1, Cavendish-street; Messrs. Currie & Co., 29, Cornhill.

SECRETARY.—Benjamin Rankin, Esq.

TEMPORARY OFFICES.—39, MOORGATE STREET.

The object of this company is to supply, at a cheap rate, the inhabitants of the cities of London and Westminster, and the boroughs of St. Marylebone and Finsbury, and the following places intermediate between those and the source of supply—namely, Barnet, Bushy, Edgware, Elstree, Finchley, Hadley, Hampstead, Harrow on the Hill, Harrow Weald, Hendon, Kingsbury, Mill Hill, Pinner, Stanmore, Sudbury, Totteridge, Watford, Whetstone, Willesden, with pure soft spring water, procured from Bushey Meadows, near Watford, and distributed through pipes constantly charged, so that upon the more turning of a tap it may be got fresh from the mains, without the intervention of a cistern, even in the top stories of the highest houses.

At a charge of from one-third to one-half less than the charges of the Grand Junction and West Midland Water Companies, a dividend of 10 per cent. would be returned upon the capital expended to carry out the undertaking.

Applications for shares to be made, addressed to the secretary of the Company, at the offices, 39, Moorgate-street; or to Messrs. Johnson, Longden, and Co., stock-brokers, Tokenhouse-yard, where detailed prospectuses and forms of application for shares may be obtained.

PRELIMINARY ANNOUNCEMENT.

ANGLO-AUSTRALIAN AND GOLD MINERS' MUTUAL LIFE ASSURANCE COMPANY.

Provisionally registered, and to be Incorporated by Royal Charter.

Capital Fund £150,000, in 15,000 shares of £10 each.—Deposit £1 per share.

First call, £1 per share, on full registration.

The paid-up capital to bear interest at the rate of 10 per cent.

This Company is formed with the view of more effectually extending the advantages of LIFE ASSURANCE to the increasing requirements of EMIGRATION, and especially of adapting its benefits to the necessities of the vast community of gold miners, who are most anxious for the introduction of such a company.

The wide field of the Company's operations, and the peculiar sources of profit, warrant the directors to expect a very large return to the shareholders, in addition to their interest of 10 per cent., while the policy holders will derive considerable profits from the working of the funds. The value of money in South Australia is still from 15 to 25 per cent. per annum.—See the *Times*, Nov. 11, 1852.

Applications for shares (in the usual form), prospectuses, agencies, &c., to be made to the secretary, at the offices of the company, J. NEWTON, English Sec., Offices, 38, Moorgate-street, London.

CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.

EXTENSION OF LIMITS OF RESIDENCE.—The assured may reside in most parts of the world without extra charge, and in all parts by payment of a small extra premium.

MUTUAL SYSTEM WITHOUT THE RISK OF PARTNERSHIP.

The small share of profit divisible in future among the shareholders being now provided for, without intrenching on the amount made by the regular business, the assured will hereafter derive all the benefits obtainable from a Mutual Office, with, at the same time, complete freedom from liability, secured by means of an ample proprietary capital—thus combining in the same office all the advantages of both systems.

The assurance fund already invested amounts to £50,000, and the income exceeds £136,000 per annum.

CREDIT SYSTEM.—On policies for the whole of life, one half of the annual premium for the first five years may remain on credit, and may either continue as a debt on the policy, or may be paid off at any time.

LOANS.—Loans are advanced on policies which have been in existence five years and upwards, to the extent of nine-tenths of their value.

BONUSES.—FIVE BONUSES have been declared; at the last in January, 1852, the sum of £131,125 was added to the policies, producing a bonus varying with the different ages from 24½ to 55 per cent. on the premiums paid during the five years.

PARTICIPATION IN PROFITS.—Policies participate in the profits in proportion to the number and amount of the premiums paid between every division, so that if only one year's premium be received prior to the books being closed for any division, the policy on which it was paid will obtain its due share.

The books close for the next division on 30th June, 1852, therefore those who effect policies before the 30th June next will be entitled to one year's additional share of profits over later assurers.

APPLICATION OF BONUSES.—The next and future bonuses may be either received in cash, or applied at the option of the assured in any other way.

NON-PARTICIPATING.—Assurances may be effected for a fixed sum at considerably reduced rates, and the premiums for term policies are lower than at most other safe offices.

PROMPT SETTLEMENT OF CLAIMS.—Claims paid 30 days after proof of death, and all policies are indisputable, except in cases of fraud.

INVALID LIVES may be assured at rates proportioned to the increased risk.

POLICIES are granted on the lives of persons in any station, and of every age, and for any sum on one life from £50 to £10,000.

PREMISSES may be paid yearly, half yearly, or quarterly, but if a payment be omitted from any cause, the policy can be revived, within 12 months.

The accounts and balance-sheets are at all times open to the inspection of the assured, or of persons desirous to assure.

A copy of the last report, with a prospectus and form of proposal, can be obtained of any of the society's agents, or will be forwarded free by addressing a line to

GEORGE H. PINCKARD, Resident Secretary,

99, Great Russell-street, Bloomsbury, London.

DRAWINGS OF A SYPHON FOR RAISING WATER FROM MINES BY A SUCCESSION OF SYPHONS.—COPIES of these drawings may be obtained at the office of T. Z. Main, 63, North Bridge, Edinburgh, with the ENROLLED DRAWINGS, on payment of One Shilling each copy, which may be transmitted in postage stamps. These drawings show a working plan of a syphon, and the manner of connecting them, with illustrations. It is expected the syphons will be exhibited in the Crystal Palace about to be opened in London.

NEW HOUSES OF PARLIAMENT.—DEFRIES' GAS STOVE RANGES, AND BATHS. just completed for two kitchens in the above building.—A great variety in stock upon the same principle.

GAS BATHS from £7. which a warm bath may be obtained for 14d. **GAS COOKING AND HEATING STOVES** for all classes, from £1. **DEFRIES'** celebrated DRY GAS METERS, 45, in use. Testimonials at the office, 145, Regent-street.—Manufacturers and dealers throughout the kingdom, in boxes 2s. 6d. each.

THE WASHINGTON CHEMICAL COMPANY, NEWCASTLE-ON-TYNE; MANUFACTURERS OF

PATTISON'S OXICHLORIDE OF LEAD. The WASHINGTON CHEMICAL COMPANY having, during the last 12 months, ESTABLISHED A MANUFACTORY OF PATTISON'S OXICHLORIDE OF LEAD, on a large scale, and being able to supply it with regularity, and to execute ORDERS without DELAY, now proceed to bring this new and valuable preparation of lead to their friends and the public, quite sure that it will

RAILWAY AND COMMERCIAL GAZETTE.

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NOTICE—TO MERCHANTS, MINERS, and all OTHERS interested in the PRODUCTION of GOLD OR SILVER, either in Australia, California, North and South America, Great Britain, or any other part of the world.—I beg to announce, that I am at all times a PURCHASER of GOLD, in gossan-quartz, or other matrix, which contains 5 per cent. of gold or upwards; and of SILVER, no matter in what matrix, which yields 15 per cent. of silver or upwards.

My operation is exclusive, and consequently, it is of vast importance to all mining undertakings, but more particularly to those who have to pay exorbitantly for labour.

BENJAMIN MASSEY, 116, Leadenhall-street, London.

COBALT AND NICKEL.—ALFRED SENIOR MERRY, REFINER AND PURCHASER OF COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN BAKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL, OXIDE OF COBALT, WIRE, &c.

REFINED METALLIC BISMUTH, GERMAN SILVER, IN INGOTS, SHEET, &c.

NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL COBALT, NICKEL, COLOUR, AND CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.—JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINERS.—Reference.—Professor Miller, King's College, London.

LOSH, WILSON, AND BELL, NEWCASTLE-ON-TYNE, MANUFACTURERS OF BAR-IRON, RAILWAY BARS, FORGE AND ENGINE WORK, CAST-IRON GOODS, and STEWART'S PATENT CAST-IRON GAS WATER PIPES.—OFFICE, 7, SISE LANE, LONDON.

PATENT GALVANIZED IRON-WORKS, SHADWELL STREET, BIRMINGHAM.—IRON WIRE, SHEETS, TUBING, and every description of WROUGHT and CAST-IRON WORK GALVANIZED by most experienced hands. Prices forwarded on application.—William Phillips and Co., Proprietors.—N.B. The above process effectually preserves from rust.

TO MALSTERS, MINERS, FOUNDERS, ENGINEERS, &c.

M. THOMAS WALTERS, ANTHRACITE PIG-IRON MANUFACTURER; proprietor of ANTHRACITE COAL, for malting and marine steam-engine purposes; and CULMS, for limestone and chalk burning.

SUPERIOR MINING COALS.

Swansea, Dec. 11, 1852.

MESSRS. JOHNSON and MATTHEY beg to inform MERCHANTS and IMPORTERS OF ORES that they have taken the SUFFERANCE WHARF and WAREHOUSES at MILLWALL, known as "MELLISH'S SUFFERANCE WHARF" extending from the RIVER THAMES to the FERRY-ROAD, and erected STEAM-ENGINE and MACHINERY for CRUSHING AND GRINDING GOLD QUARTZ, SILVER, LEAD, and OTHER ORES, and having such properly mixed and sampled for sale; they are also erecting FURNACES and APPARATUS for REDUCTION OF ORES of CERTAIN CLASSES, on much improved principles.

The management will be under a gentleman who has had very great experience, who will reside on the premises, and act under the immediate supervision of Messrs. Johnson and Matthey. The ore floors and warehouses are well secured, and only those persons engaged in the operations who are well qualified, and of known respectability of character.

The want of such an establishment for the Port of London has been long felt, and Messrs. Johnson and Matthey feel confident of giving satisfaction to those who confide ore to their care.—Office, 79, Hatton-garden, London, July 28, 1852.

MR. LELEAN TRANSACTS, for principals, BUSINESS IN HOME AND FOREIGN MINES, including Australian, California, North and South American, Imperial Brazilian, Cuban, Linseed, &c. Also, BUYS AND SELLS every description of RAILWAY, BANKING, INSURANCE, GAS, WATER, and STEAM COMPANIES' SHARES, BONDS, and DEBENTURES. Mr. LELEAN would particularly recommend to the notice of capitalists the AUSTRALIAN GOLD SHARES; and having peculiar sources to obtain certain information of the present state and future prospects of some of the best companies, he is in a position to point out those he considers most promising at the present time. Parties wishing for secure INVESTMENTS, ranging from 5 to 20 per cent., can have the ADVICE of a general upmanner of 20 years a writer on and connected with the Money Market. Price lists and information, through the medium of the post, to parties resident in the country.—76, King William-street, City.

MR. CHARLES POWELL, MINING SHARE BROKER, NO. 35, UNION STREET, STONEHOUSE, DEVON.—Mr. C. POWELL OFFERS HIS SERVICES to the Public for the PURCHASE or SALE of MINING SHARES on the usual terms of commission.

LIST OF SHARES FOR SALE.

CORNWALL.—
Wheal Golden, Perranzabuloe.
Balnoon Consols, Uly Lestant.
Caradon Wood, Linkinhorne.
Hawkmoor, Calstock.
West Wheal Edward, Calstock.
Wheal Langford, Callington.
Bell and Lanarth, Gwennap.
Stoke Climsland Consols, Stoke Climsland.
Stoke Climsland Consols West.
Gonamena, St. Cleer.
Hington Down Consols.

SOMERSET.—
Exmoor Eliza, near South Molton.
Molland, near South Molton.
December 31, 1852.

MMR. THOMAS BROWN, MINE SHARE BROKER, RIDGWAY, PLYMPTON, DEVON, has SHARES FOR SALE in Devon Mines of great promise, now in full operation, including Yeoland Consols, Bottie Hill, Boringdon Consols, Wheal Sidney, Tavy Consols, Devon and Courtenay, Gavton United, Exmoor, &c. N.B. All reports may be obtained on application to Mr. Thos. Brown, at his office.

MESSRS. MOLYNEUX AND CO., 114, BISHOPS-GATE-STREET WITHIN, opposite CROSBY HALL CHAMBERS, and 10, BUCKINGHAM-STREET, ADELIPEL.—Offices of the Wheat Fortune (South Tawton), Great Wheal Tomkin (Callington), Wheal Henry (Paul, Cornwall), Furdson Manor Mine (South Tawton, Devon), &c.

MINING INVESTMENT.—T. FULLER AND CO., 51, THREADNEEDLE-STREET, LONDON, beg to call attention of their friends and the public to the present favourable opportunity for the PURCHASE of both DIVIDEND and SPECULATIVE MINES, many of which are paying from 15 to 25 per cent., upon present purchase; and are always in a position to BUY AND SELL, in both BRITISH and FOREIGN; and have SHARES in several MINES now on hand, approaching a dividend state, particulars of which may be obtained, either personally or by letter. T. Fuller and Co. being in daily communication with agents of high and scientific and practical experience, have the means of obtaining the most correct information of the principal MINES in Devon, Cornwall, and Wales; and have specially FO R SALE.—Alfred Consols, Butterdon, Clive, Clystern Consols, Castle Dinas, Devon Great Consols, Gonamena, Merllyn, North Britain Burra Burra, Tincroft, Treleigh Consols, Tavy Consols, Wheal Mary Ann, West Caradon, West Providence, Wheal Arthur, Wheal Reeth, South Carn Brea, Wheal Zinc, Anglo-Californian, Carsons Creek, Britannia, British Australian, Port Philip, Quartz Rock, and West Mariposa. Every information given, either personally or by letter.

NORTH BRITAIN BURRA BURRA COPPER MINE.—The certificates in the Company are made to bearer, therefore no stamp, transfer, or registration is necessary, and no Deed has to be signed.

This important MINE, having created considerable excitement and attention among the most experienced and practical mineralogists of the day, who all concur in pronouncing it to be the most important discovery of copper ore in the kingdom, from the large quantities of malachite ore taken 20 ft. from surface, resembling in character the Burra Burra in Australia, and worth £20 per ton; and from the immense size of the lode, being 30 ft. wide, its perfect formation, with an abundance of the finest gossan, together with the important geological features of the strata, must be conclusive of the existence of an abundance of mineral, 40 tons of which have already been taken from a comparatively shallow depth, and now lying on the floors.

T. FULLER and Co., 51, Threadneedle-street, London, has a FEW SHARES in this valuable MINE FOR SALE, application for which, with full particulars, can be made either personally or by letter.

MINING RECORD OFFICE, 26 AUSTINFRIARS, LONDON.—Mr. MANUEL'S OFFICES are expressly for the USE of COMMITTEES and COMPANIES conducting their BUSINESS in LONDON, and entirely free from share dealing. Mr. MANUEL will be happy to CONDUCT THE LONDON AGENCY of any MINES now at work, or about to be worked, he having spacious and convenient OFFICES for that PURPOSE.—Terms on which the business is conducted to be had on application, either by letter or in person.

Sixteen years' experience will enable Mr. Manuel to give suitable advice on all occasions.—Offices of the West Wheal Rose, West Callington, Busparvo, Gallo-y-Maen, Great Crinnis Consols, Union Tin, &c.

MESSRS. TREDDINNICK AND CO., AUCTIONEERS, STOCK and SHAREBROKERS, and DEALERS in MINING and OTHER PROPERTY, 6, HAYMARKET, and 12, ST. MICHAEL'S-ALLEY, CORNHILL, LONDON; and Mr. JOSEPH TREDDINNICK, Stock and Sharebroker, Mine Inspector, and Machinist, HAYLE, CORNWALL.—Mines pay from 12½ to 15 per cent. per annum; and Messrs. TREDDINNICK AND CO. are at all times in a position to BUY AND SELL in all DIVIDEND and promising MINES.

The Weekly List of Prices, and Circular of Mining Information, to be had upon application, of Messrs. Tredinnick.

MR. ROBERT TRIPP, MINING AGENT, has for BONA FIDE SALE SHARES in the BEST DIVIDEND MINES; also in PROGRESSIVE ONES, which will shortly pay dividends—viz., Alfred Consols, Condurrow, North Trelawny, Mary Ann, West Providence, Wheal Golden, Harriet, Sidney, John, Bedford United, Speedwell, Great Alfred, Mendip Hills, North Buller, E. Tamar, East Wheal Vor, Pemroke and Crimiss, Leeds Town Consols, Charlestown United, Peru, Wheal Lemon, Arthur, Brewer, South Bassett, Cubert, East Wheal Russell, Bodmin Consols, Crebey, South Carn Brea, &c. Foreign Cocreas, Linares, St. John del Rey, Cobre, &c.; and the Californian and Australian "gold" shares. Every information, the most authentic and respectable, obtained from the mining districts.

Mining Office, St. Michael's-chambers, St. Michael's-alley, Cornhill, London.

B RU CUT U GOLD MINING COMPANY. EMPIRE OF BRAZIL.

Capital £75,000.—In shares of £1 each, fully paid up.

Of which 17s. 6d. per share will be returned to the shareholders, if upon the report of a trial, to be made by competent mining engineers, it should be determined not to proceed with the adventure.

ON THE COST-BOOK PRINCIPLE.—No Deed necessary to be signed.

COMMITTEE OF MANAGEMENT.

GEORGE VINCENT DUVAL, Esq., Deputy Chairman of the Imperial Brazilian Mining Association.

JOHN GARDINER, Esq., Director of the Sovereign Life Assurance Company.

ROWLAND G. ALSTON, Esq., Director of the Phoenix Life Assurance Company.

REV. J. BARRETT, M.A., Chairman of the Athenaeum Life Assurance Company.

JOSEPH TULLY, Esq., of Rio de Janeiro, and Conduit-st., West, Westbourne-ter.

(With power to add to their number.)

BANKERS—Messrs. Heywood, Kennard, and Co., Lombard-street.

AUDITORS—

W. Goodship, Esq., actuary and accountant; G. Thomas, Esq., Winchester House.

SOLICITORS—Messrs. Tucker and Sons, Sun Chambers, 61, Threadneedle-street.

STOCK BROKERS—Messrs. Carden and Whitehead, 2, Exchange-buildings.

MINING AGENT IN BRAZIL—Capt. Wm. Verran, late chief mining captain at the St. John del Rey Mine of Moro Velho.

AGENTS IN RIO DE JANEIRO—Messrs. Joseph Tully and Co.

TEMPORARY OFFICES—No. 58, OLD BROAD STREET.

This company is formed for the purpose of purchasing and working the mining property of Brictuna, in the province of Minas Geraes, in the Empire of Brazil.

Applications for shares and prospectuses to be made to the brokers, and at the temporary offices of the company, where may be seen a large map of the estate, the reports, and specimen of the ore.

L A PERUVIENNE GOLD WASHING COMPANY OF CARABA-YA, IN PERU.

Constituted under the laws of Peru, and established in France as a "Société en Commandite," for a duration of 99 years.

Capital £150,000, in 150,000 shares of 25 fr., or £1 each, to bearer (as porteur), payable on allotment, without any further liability.

GERANT—M. H. De Varagine, formerly Diplomat on behalf of France in South America, 58, Rue Taitbout.

CONSULE DE SURVEILLANCE IN PERU.

His Excellency General SANTA CRUZ, Ex-President of Bolivia and Peru, and now Minister Plenipotentiary from Bolivia to the Court of France, Faubourg St. Honore.

DON FRANCISCO DE RIVERO, Chargé d'Affaires of Peru in France.

M. ALCIDE D'ORBIGNY, Doctor of Science, Knight of the Legion of Honour, Rue St. Dominique, St. Honore.

LE COMTE DE VERNEUIL DE RANVILLE, Chairman of the Versailles Railway.

M. MONTANE, banker at Lima, Paris, and Bordeaux, Membre du Corps Legislatif, Paris.

M. E. LECOMTE, Membre du Corps Legislatif, Paris.

M. CHAPIER, formerly Secretary-General to the Tours & Nantes Railway Company.

M. BONNEAU DU MARTRAY, Capitaine d'Etat Major, Rue de l'Isle.

COMMITTEE OF MANAGEMENT IN LONDON.

DON MARIANO DE LA FUENTE, Attaché to the Peruvian Legation in London, 15, Upper Montague-street.

SIR JOHN B. N. CAMPBELL, K.C.H., Director of the London and Provincial Bank.

WILLIAM HENDERSON, Esq., Park-place, Villas, Maida-hill West.

CHARLES HENNEAGE, Esq., 3, Cadogan-place.

W. D. SEYMOUR, Esq., M.P., Thurloe-square, Brompton.

CLEMENT TABOR, Esq., 26, Cornhill, and Raye, Essex.

ALEX. WATKINS, Esq., Directory of the Tyne Colliery Company, 61, Moorgate-st.

BROKERS—Messrs. Brunton and Son, Auction Mart; Messrs. Batton and Wood, 1, Crown-court, Threadneedle-street.

BANKERS—In Paris: Messrs. Montané and Co., 13, Rue Grange, Bateliere.

In London: London and County Joint-Stock Bank.

AUDITORS—Charles Wood, Esq., 9, Tokenhouse-yard; James Fahey, Esq., 15, York-place, Brompton.

SECRETARY—Mr. Henry James Castie, Associate of the Institution of Civil Engineers.

JUDICIAL COUNCIL IN PARIS—M. Gaudry, barrister, leader of the bar; M. Bellant, solicitor.

SOLICITORS IN LONDON—Messrs. Chilton, Burton, and Johnson, 7, Chancery-lane.

OFFICES—IN PARIS: 33, RUE TAITBOUR.—IN LONDON: 70, CORNHILL.

This company, established with the full support and concurrence of the Peruvian Government, is formed for the purpose of washing and working for gold upon several highly valuable freehold concessions along the rivers and streams in the province of Carabaya, in Peru, embracing an extent of nearly 75 miles, together with the agricultural lands of Moncecaro and Aporama, the former of which have been some time under work, and according to the Government journal *El Comercio de Lima*, have realised 100,000 fr. for four days' work, by ten persons. Soundings also have been made in the rivers, and several nuggets or pepites of gold have been obtained, one of them of 4 lbs. weight.

The chief families in Peru, as well as parties holding the highest official appointments in the Government, are among the concessionaries.

The terms upon which the important concessions are agreed to be transferred to the Company are extremely favourable, and are now in progress of execution.

Correspondence has taken place between the Company and the Peruvian Legations at Paris and London confirmatory of all the representations made by the concessionaries, and assuring the company of the direct countenance and support of the diplomatic and other agents of the Government.

The appointment of all engineers, agents, and servants of the company, and the entire disposal of the capital, is to be subject to the approval of the English Committee.

A certified copy of the Act and of the necessary official documents, as well as samples of the gold, can be seen on application to the secretary, and full prospectuses may be obtained at the Company's offices, or from the brokers, to whom application for shares may be addressed in the following form:—

To the Committee of Management of La Peruvienne Gold Mining Comp. of Carabaya.

I hereby request to have allotted to me shares of £1 each in the above Company, and I agree to accept the same, or any portion thereof, and to pay the amount thereof when required.

Name in full..... Address..... Reference..... Signature.....

Reference..... Signature.....

The MARQUIS OF DONEGALL, G.C.H. & P.C.

SIR ROBERT PRICE, Bart., M.P.

DIRECTORS.

Sir ROBERT PRICE, Bart., M.P., Foxley Park, Herefordshire; and Stratton-street, Piccadilly—Chairman.

The Most Hon. the MARQUESS OF DONEGALL, G.C.H. & P.C. (Lord-Lieutenant of the County of Antrim), Ormeau Park, Antrim; and 6, Portland-place.

Sergeant FRANCIS S. MURPHY, M.P., 3, Serjeant's Inn, Hampstead.

MATTHEW CRAWFORD, Esq., B.A.L., Middle Temple; and Havestock Hill, HANRY W. WOOD, Esq., Briton Ferry, Glamorganshire.

BANKERS—Messrs. Price, Marryat, and Co., 3, King William-street, City; Messrs. Cocks, Biddulph, and Co., 43, Charing Cross.

CONSULTING MINING ENGINEER.

David T. Ansted, Esq., F.R.S., F.G.S., Professor of Geology, King's College.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
6120 Alfred Consols (copper), Phillack	£1 16s	£13 1/2	13 1/2 1/2	£5 8 0	20	7 0—Nov., 1852.
1248 Alty-y-erib (silver-lead), Talybont, Wales	4	2	—	0 7 0	0	5 0—Jan., 1851.
2880 Anglessea Coal Company	4	4%	—	0 10 0	0	2 0—Nov., 1852.
1824 Baleswidens (tin), St. Just	11 1/2	10	—	10 9 0	0	5 0—Nov., 1852.
4600 Bedford United (copper), Tavistock	3 1/2	9 1/2	9 1/2 1/2	4 2 6	4	4 0—Dec., 1852.
5000 Black Craig (lead), Kirkcudbrightshire	5	3 1/2	3 1/2	0 2 6	0	2 0—Nov., 1852.
64 Boweswell Downs (tin), St. Just	—	100	—	750 0 0	—	—May, 1852.
103 Botallack (tin, copper), St. Just	182 1/2	265	—	470 10 0	8 0	0—Nov., 1852.
1000 Bryntail, Llanidloes, Montgomeryshire	3 1/2	10 1/2	—	0 5 0	0	5 0—June, 1851.
5000 Callington (lead, copper), Callington	£7 7s.	2 1/2	—	1 8 0	0	4 0—Sept., 1847.
1000 Carr Ires (copper, tin), Illogan	15	90	—	212 0 0	2	0—Nov., 1852.
124 Cambard (copper), Gwenap, Cornwall	75	18	18	—	—	—
256 Cossdour (copper, tin), Camborne	20	100	100	25 0 0	3	0—Dec., 1852.
2310 Cook's Kitchen (copper, tin), Illogan	15 1/2	2 1/2	—	—	—	—
128 Cwmyntswith (lead), Cardiganshire	60	190	—	15 0 0	5	0—Dec., 1852.
1024 Devon Great Consols (copper), Tavistock	1	400	—	295 0 0	10	0—Nov., 1852.
673 Ding-Dong (tin), Gulval	5	6	—	35 0 0	—	—1850.
180 Dolcoath (copper, tin), Camborne	257 1/2	56	—	85 14 0	—	—1847.
2500 Drake Walls (tin, copper), Calstock	7 1/2	6 1/2	—	0 5 0	—	—Jan., 1852.
380 East Darren (lead), Cardiganshire	28	80	—	2 0 0	2	0—July, 1852.
128 East Pool (tin, copper), Pool, Illogan	24 1/2	165	—	233 0 0	—	—1843.
94 East Wheal Croft (copper), Illogan	125	65	—	840 0 0	—	—
128 East Wheal Rose (silver-lead), Newlyn	50	245	—	245 0 0	10	0—March, 1852.
300 Fenton Pottery Coal and Iron	6	9	—	1 4 0	0	12 0—Aug., 1852.
494 Fowey Consols (copper), Twardreath	40	30	—	—	—	—
3715 General Mining Co. for Ireland (cop., lead)	1 1/2	3	—	0 17 5	0	1 8—Dec., 1852.
2000 Goginan (lead), Cardiganshire, Wales	8	6 1/2	—	22 0 0	—	—
1024 Gomenara (copper), St. Cleer	12 1/2	10 1/2	10	0 7 6	0	7 6—Dec., 1852.
96 Great Consols (copper), Gwenap	1000	200	—	353 6 8	—	—Jan., 1851.
5000 Great Onslow Consols, Camelford	1 1/2	4 1/2	—	0 2 0	0	2 0—June, 1852.
13750 Great Polgoon (tin), St. Austell	3	4 1/2	4 1/2 1/2	0 10 0	0	4 0—Oct., 1852.
119 Great Work (tin), Germoe	100	170	—	149 0 0	7	10 0—Nov., 1852.
1024 Herodsfoot (lead), near Liskeard	8 1/2	5	—	0 7 6	0	2 6—Aug., 1851.
1000 Holm bush (lead, copper), Callington	24	21	—	23 0 0	—	—Feb., 1844.
2000 Holford (copper), near Tipperary	11	7	—	3 5 0	0	5 0—Sept., 1852.
76 Jamaica (lead), Mold, Flintshire	279 1/2	—	—	224 0 0	—	—
786 Kirkebrightshire (lead), Kirkebright	9 1/2	5	4 1/2 1/2	0 15 0	0	10 0—Dec., 1852.
1000 Lewis (tin, copper), St. Erth	17	13 1/2	—	2 0 0	0	10 0—Aug., 1851.
160 Levant (copper, tin), St. Just	2 1/2	135	—	1036 0 0	2	0—Feb., 1852.
1000 Liaburane (lead), Cardiganshire, Wales	75	650	—	685 0 0	15	0—Sept., 1852.
5000 Low's Patent Copper Smelting Company	9	10	—	1 0 6	0	4 0—July, 1852.
5000 Marilyn (lead), Flint	2 1/2	3 1/2	4 1/2 1/2	1 2 0	0	4 0—Oct., 1852.
100 Milwr (lead), Flint	150	175	—	10 0 0	10	0—Oct., 1851.
20000 Mining Co. of Ireland (copper, lead, coal)	7	14 1/2	14 1/2 1/2	7 14 0	0	3 6—June, 1852.
200 North Pool (copper, tin), Pool	22 1/2	235	—	256 10 0	7	10 0—Oct., 1852.
140 North Roskra (copper), Camborne	10	180	—	237 10 0	2	10 0—Sept., 1852.
6000 North Wheal Bassett (copper, tin), Illogan	—	10 1/2	—	1 6 0	0	5 0—Nov., 1852.
6400 Par Consols (copper), St. Blazey	1 1/2	17	17	22 1 0	0	16 0—Oct., 1852.
1100 Perran St. George (cop., tin), Perranzabuloe	21 1/2	40	—	1 15 0	0	10 0—June, 1851.
200 Phoenix (copper, tin), Linkinhorne	30	750	—	240 0 0	15	0—Sept., 1852.
1000 Polberro (tin), St. Agnes	15	13	13	4 5 0	1	0—Dec., 1852.
5000 Providence Mines (tin), Uny Lelant	20 1/2	22 1/2	—	18 14 6	0	10 0—Nov., 1851.
1948 Rix Hill (tin), Tavistock	2 1/2	3 1/2	3 1/2 1/2	0 4 0	0	4 0—Oct., 1852.
5040 Rixton (lead), Snailbeach, Shrewsbury	6s.	1	—	0 10 8	—	—July, 1852.
256 South Caradon (copper), St. Cleer	2 1/2	135	140	265 0 0	2	10 0—Nov., 1852.
9000 South Tamar (silver-lead), Beaford	4 1/2	5 1/2	5 1/2 1/2	0 10 0	0	5 0—Oct., 1852.
6000 Tincroft (copper, tin), near Pool, Illogan	7 1/2	12 1/2	—	6 8 0	0	10 0—Aug., 1852.
512 Trehant (silver-lead), Menheniot	—	15	15	14 7 6	0	10 0—Nov., 1851.
5000 Trelech Consols (copper), Redruth	6	2 1/2	2 1/2	1 3 0	0	5 0—Oct., 1847.
96 Tresevann (copper), Gwenap, Cornwall	32 1/2	150	—	1680 15 0	—	—1848.
120 Trethellan (copper), Gwenap, Cornwall	5	13	—	402 10 0	—	—April, 1851.
120 Trevisekey and Barrier (copper), Gwenap	130	125	—	293 0 0	5	0—Nov., 1852.
100 Trumpet Consols (tin), near Helston	95	135	—	25 0 0	5	0—Dec., 1852.
400 United Mines (copper), Gwenap	40	385	380	13 15 0	8	15 0—Nov., 1852.
1024 Wellington (copper, tin), Perranzabuloe	7 1/2	8	2 2 6	—	5—March, 1851.	
256 West Cadron (copper), Liskeard	20	205	205	198 5 0	6	0—Dec., 1852.
1024 West Providence (tin), St. Erth	5	54	52 53 54	15 10 0	2	10 0—Dec., 1852.
256 West Bassett (copper), Illogan	10 1/2	530	—	350 0 0	15	9 0—Dec., 1852.
256 West Brewer (copper), Gwenap	4	22	20	220 0 0	20	0—Sept., 1852.
256 West Buder (copper), Redruth	5	800	—	1 8 2	0	2 0—Dec., 1852.
256 West Clifford (copper), Gwenap	—	150	—	0 7 6	0	2 6—Dec., 1852.
4280 West Exmoor and Adams Unltd	4 1/2	5 1/2	—	0 5 0	0	5 0—Oct., 1852.
1000 Wheat Friendly (tin), St. Agnes	70	10	—	5 0 0	0	5 0—Dec., 1852.
128 Wheat Friendship (copper), Devon	120	125	—	2339 10 0	8	0—Feb., 1852.
5000 Wheat Golden (sil.-lead), Perranzabuloe	3	4 1/2	—	1 5 0	0	5 0—Sept., 1852.
256 Wheat Jane (silver-lead), Kex	8	8 1/2	—	1 0 0	1	0—Oct., 1852.
430 Wheat Lovel (tin), Wendron	33	60	—	17 10 0	2	10 0—Oct., 1852.
112 Wheat Margaret (tin), Uny Lelant	79	117	—	196 0 0	2	10 0—May, 1852.
512 Wheat Mary Ann (lead), Menheniot	5 1/2	28	26 30 32	23 5 0	1	0—Sept., 1852.
80 Wheat Owles, St. Just, Cornwall	70	125	—	72 13 0	12	1 3—Nov., 1852.
240 Wheat Reeth (tin, copper), Uny Lelant	20 1/2	50	—	40 10 0	3	0—Sept., 1852.
198 Wheat Seton (tin, copper), Camborne	107	200	—	227 10 0	4	0—Dec., 1852.
529 Wheat Trelawny (silver-lead), Liskeard	8 1/2	52	52 55 60	26 19 0	2	0—May, 1851.
1024 Wheat Tremayne (tin, copper), Gwinear	9 1/2	35	55	9 5 0	6	10 0—Dec., 1852.
5000 Wicklow (copper), Wicklow	5	41 1/2	42 1/2 3	18 13 0	1	3 0—Aug., 1852.

FOREIGN MINES.

Shares.	Paid.	Last Price.	Present.	Paid.	Last Price.	Present.
5000 Alten Mining Company (copper), Norway	£14 1/2	4 1/2	4 1/2 1/2	3 10 0	0	10 0—Dec., 1852.
7200 Baden, Grand Duchy of	1	14	13 1/2	6 1 0	0	1 0—Nov., 1852.
10000 Brazilian Imperial (gold), Brazil	23	4 1/2	4 1/2 1/2	—	—	—Dec., 1844.
2164 Burns' Burra (copper), South Australia	5	125	127	120 0	5	0—Sept., 1852.
12000 Cobre Copper Company (copper), Cuba	40	42	42 1/2	53 12 0	2	0—July, 1852.
10000 Copiapo Mining Company (copper), Chile	14	74	74	3 18 0	0	5 0—Oct., 1852.
20000 General Min. Assoc. (iron, coal), Nova Scotia	20	15 1/2	15 1/2	7 10 0	0	5 0—June, 1852.
5000 Lineras (lead), Pozo Ancho, Spain	3	8	8 1/2 1/2	0 3 0	0	3 0—Sept., 1852.
2700 Marmato (gold), Colombia	2 1/2	12	—	4 0 0	1	0—Nov., 1852.
20000 Mexican and South American (cop.), Mexico	9	4 1/2	4 1/2 1/2			